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Permanency : Situating formalization of informal settlements in the City of Tshwane, South Africa

Nomasonto Ngwenya

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UGA
Université
Grenoble Alpes

THÈSE

Pour obtenir le grade de

DOCTEUR DE L'UNIVERSITE GRENOBLE ALPES

préparée dans le cadre d'une cotutelle entre l'Université Grenoble Alpes et the University of Pretoria

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préparée au sein des **Laboratoires PACTE-UMR 5194** et **Department of Anthropology and Archaeology**

dans les **Écoles Doctorales Sciences de l'Homme, du Politique et Territoire** et the **Faculty of Humanities**

Permanency: Situating formalization of informal settlements in the City of Tshwane, South Africa.

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*For my children
I hope my PhD journey inspires you to aspire to greater heights.*

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LIST OF RECURRENT ACRONYMS

ACCSF	African Capital Cities Sustainability Forum
ANC	African National Congress
BNG	Breaking New Ground
C40	Cities Climate Leadership Group
CoT	City of Tshwane
DA	Democratic Alliance
EIA	Environmental Impact Assessment
EJ	Environmental Justice
GBCSA	Green Building Council South Africa
GLTN	Global Land Tool Network
IDP	Integrated Development Plan
ICLEI	Local Governments for Sustainability
NEMA	National Environmental Management Act
NUA	New Urban Agenda
NUSP	National Upgrading Support Programme
OECD	Organization for Economic Co-operation and Development
RDP	Reconstruction and Development Plan
SDGs	Sustainable Development Goals
SFC	Slum-free Cities
UCLG	United Cities and Local Governments
UISP	Upgrading of Informal Settlements Programme
UPE	Urban Political Ecology

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RÉSUMÉ

Cette étude cherche à repenser la place des espaces informels dans les discours sur la durabilité et la gouvernance environnementale en Afrique du Sud à travers une optique critique et de Southern Theory. Il ne fait aucun doute que le paradigme de la durabilité urbaine est devenu une préoccupation croissante dans la gouvernance urbaine. Diverses logiques de gouvernance environnementale mondiale, telles que les Objectifs de développement durable (ODD), en particulier l'ODD11, ont renforcé l'importance de l'informalité dans cet agenda de durabilité urbaine, avec leurs appels à des interventions pour traiter les environnements de vie pauvres et faire face aux établissements informels (UNHabitat). Il est intéressant de noter que, si l'informalité urbaine occupe désormais une place prépondérante dans les récits et la gouvernance de la durabilité urbaine, l'informalité continue d'être considérée comme une antithèse de la durabilité. La montée de la formalisation en tant que processus de production de l'espace des établissements informels, dans des villes telles que Tshwane, a mis en lumière ces politiques de gouvernance environnementale urbaine. Certaines avancées ont été réalisées pour remettre en question ce que Myers (2008) définit comme une "déconnexion entre le développement urbain durable et la justice environnementale dans les villes d'Afrique sub-saharienne" (p. 705). Certains chercheurs, dont Patel (2009), ont également commencé à remettre en question l'absence d'objectifs de justice environnementale dans les politiques de durabilité. Néanmoins, il y a encore peu d'études qui interrogent la manière dont les rationalités de gouvernance contradictoires de la durabilité urbaine et de la justice environnementale se croisent dans les discours de gouvernance urbaine locale dans le Sud global. Pour combler cette lacune, je m'appuie sur l'écologie politique urbaine et la Southern Theory pour analyser comment ces modes sous-tendent les injustices environnementales persistantes dans les espaces informels. Pour concrétiser cet argument, j'analyse une "étude de cas intégrée" (Lin, 1993) de la formalisation des quartiers informels de la ville de Tshwane. À travers ce cas, je montre que, bien que la formalisation soit apparue comme une intervention de la politique du logement prétendant s'attaquer aux fardeaux environnementaux des quartiers informels, elle présente néanmoins l'informalité comme un problème de tenure plutôt que comme une préoccupation environnementale. En conséquence, la durabilité des espaces informels est encore plus marginalisée dans les discours sur la gouvernance urbaine durable. En utilisant ce que j'appelle la "permanence" - comme outil analytique pour explorer le raisonnement décisionnel [hypothèses et croyances] des acteurs de la gouvernance urbaine engagés dans la formalisation des quartiers informels de Phomolong et Jeffsville à Tshwane - je montre que dans le processus de formalisation, les relations implicites d'hégémonie/de pouvoir sont renforcées, réduisant au silence les voix des subalternes déjà marginalisés sur le plan environnemental dans la reproduction de leurs environnements de vie. Cette étude, qui vise à avoir des implications en matière de gouvernance/politique, appelle à réimaginer la gouvernance des espaces informels, non seulement du point de vue de la restructuration spatiale/du processus physique, mais aussi en créant des espaces de débat donnant voix et pouvoir aux personnes concernées.

CHAPTER 1

INTRODUCTION

1.1 Justification and context: Tshwane's spaces of environmental [in]justice

“Adopting sustainability as a primary objective of service delivery and urban development will result in greater prosperity and safety for citizens, and indeed for the world at large.....”

These were the opening remarks of Solly Msimanga, the erstwhile executive mayor of the City of Tshwane, at the 2018 African Capital Cities Sustainability Forum (ACCSF, 2018). These utterances captured the nuanced understandings held by the City on urban sustainability. Not only were the remarks justifying the City's subscription to the burgeoning sustainable cities' imaginary, but they also suggested sustainability as a harbinger of service delivery towards a more sustainable urban development. This was encouraging, especially considering Tshwane's complex spatial dynamics constituted by the uneven spatial development of informality and environmental injustice. Moreover, these sustainability imaginary debates were happening against the backdrop of the City's formalization objective. So, was Tshwane becoming an environmentally just city?

- [sustainability]

There is no doubt that the sustainability paradigm has become a growing concern in urban governance. In the meantime, global environmental governance interventions, including the Sustainable Development Goals (SDGs), particularly the SDG11, have made some notable advances demanding urban policy actors to place emphasis on making cities inclusive, safe, resilient and sustainable. At the centre of these objectives is the liveability of human settlement environments. At the same time, a large percentage of the population in the global south that live in informal settlements (UN-Habitat), are subjected to marginalized and unjust environments. There have been some advances to question what (Myers, 2008) frames as a “disconnection between sustainable urban development and environmental justice in sub-Saharan African cities” (p:705). Some scholars, including (Patel, 2009) have started to question the absence of environmental justice objectives in sustainability policies. Nevertheless, there remains a dearth of studies that examine how different rationalities of urban sustainability and environmental justice intersect in local urban governance discourses in the global South.

Vallance & Perkins (2010) remind us that urban sustainability has become an alluring goal for many cities. This goal has become so entrenched to the extent that ‘one could argue that city's right to exist must now be articulated in terms of sustainability’ (Vallance & Perkins, 2010). As a result, the idea of a sustainable city has been implanted in the governance of cities as a promoter of sustainable urban development. However, this implanting of sustainability has not been without criticism. On one hand,

it is criticized for its reluctance to escape the conservation terms under which it was coined. On the other, it is criticized for transporting a neoliberal ideology. For example, a political ecology critique coming from the work of (Rose & Miller, 2010), denounces the mainstream conservation within which sustainability is rooted as promoting the neoliberalisation of the environment.

The intersections of informality and sustainability in urban governance have also recently gained scientific attention. This relationship generally articulates informality as an antithesis of sustainability. One of the rationales behind such interventions is that informal structures threaten the sustainability of cities (You, 2007). This framing of informality as an obstruction to sustainability draws from the dominant formal-informal binaries abound in conventional urban discourses. In those settings, informality is presented as a foreign intrusion, for example, a source of chaos to middle-class order (Ballard, 2004). Critical urban scholars working on African cities have already started to counter the common conceptions of informal settlements, generally characterized by poor living environments, as a hindrance to sustainable development and destroying the environment (Ramutsindela, 2002). The emergence of subaltern discourse response positions slums as vibrant living spaces full of political expression and self-organization (Roy, 2011). In the view of Roy (2011) there is an urgency to shift the discourse on cities of the global south, and this requires revisiting some of the knowledge production theories in that regard.

To avoid terminology confusion, informality is a term commonly used in development studies and geography-, the two disciplines that inform this thesis. In this thesis, I use the term informality to speak of and about informal human settlements¹.

- Formalization

Nonetheless, this opposition against the informal in relation to other 'formal' spaces and as a legitimate element of the 'urban network' (Routledge, 2010) plays out in urban governance discourses and processes. In post-1994 South Africa, there have been various efforts to intervene against informality, such as government programmes aimed at the eradication of informal settlements. In this respect, resettlements and upgrades emerged as some of the policy interventions for informal settlements (Dixon & Ramutsindela, 2006; Huchzermeyer, 2002). For example, intervention efforts such as formalization suggest a deliverance of a 'just' and sustainable urban governance (Jones, 2017). Unlike the harsh approach of its predecessor-eradication- formalization was shifting discourses to a much softer approach. As I will show, formalization has created the anticipation of inclusivity and environmental justice. You (2007) reminds us, that the 'illegal' status of informal settlements excludes them from their entitlement to basic services such as water, sanitation, electricity, solid waste collection, etc. Formalization, on the other hand, promises spatial interventions through the formalization of tenure and the upgrading of basic services to move informality from its typical position of deprivation and misrecognition in governance structures. Working with permanency illustrates that the tenure-formalization approach, introduced by formalization to urban governance of informality, can be understood as the transportation of the neoliberal approach of sustainability.

¹ In international literature, various terms are used in reference to informal human settlements. These nuances include informal settlements, unplanned settlements, urban villages, informal housing, shantytowns, shack-lands, squatter camps, favelas, slums (Huchzermeyer, 2008; Jones, 2017). I use informal settlements interchangeably with informal spaces. [see chapter 2].

- Justice

The form of justice delivered by formalization interventions has been questioned in literature by southern scholars. Roy (2005), for instance, argues that upgrades and relocations introduce modernity to informality, but fail to address other social aspects such as the political capacity of the informal dweller. Similarly, Dixon & Ramutsindela (2006) propose that such interventions into informality should place emphasis on strengthening the political agency of its beneficiaries.

While formalization pursues environmental justice for the informal spaces, these spaces nonetheless continue to be defined by unhealthy and unsustainable environments. Vallance & Perkins (2010), on the other hand, want us to recognize the difficulties and failures of sustainability in policy through the complex relationship between sustainability and its bio-physical environmental goals. I argue, however, that this contradiction between formalization and its objective of environmental justice, rests with the apolitical nature of the notion of sustainability. As can be seen through the formalization of informal settlements in Tshwane, the interface between the sustainable city rationale and the formalization rationale obscures our attention to the fact that the emergence of informal settlements is a typical structural manifestation of the marginalization and misrecognition of identities.

In my view, formalization as a governance intervention under the sustainable cities goal is not able to hold its environmental justice promise. This work thus attempts to conceptualize different ways of understanding how the desire to be a sustainable city has stirred urban politics and impacted environmental justice in Tshwane. Therefore, to understand how, at their intersection, Tshwane's sustainable city aspirations and formalization's promise of environmental justice are contradicted, I grapple with permanency mainly through the lens of the formalization experiences of the Phomolong and Jeffsville informal settlements in Tshwane. A telling account of their environmental unjust conditions is captured in figures 1.1 and 1.2. In Jeffsville, as figure 1.2 shows, environmental injustice is characterized by sinkhole formations.



Figure 1.1: The Aftermath of 2012 Pipe Burst Pipe Incident in Phomolong

Source: Etienne Creux (2012)

Following this background and context of the study, I now discuss the research questions framing as well as the key concepts used in this study. This is followed by a presentation of the state of research, including a debate on how the idea of permanency contributes to postcolonial and southern scholarly debates. The final segment of this chapter introduces a brief synopsis of the other seven chapters constituting this thesis.



Figure 1.2: Sinkhole Formation in Jeffsville

Source: Sam (2020)

1.2 Research questions and key concepts

This thesis proposes that through tracing how formalization unfolded in Tshwane, through the idea of permanency, we learn more about the City's housing and urban politics. Furthermore, it argues that scrutinising Tshwane's sustainable city politics by accompanying the city through its different motions of becoming a 'sustainable African city' [ACCSF & Sustainability Week] can reveal the environmentally biased nature of sustainable urban governance. Thus, the objective of this thesis is not to argue whether Tshwane can be or is a sustainable city. Instead, this study is more intrigued by the question of how the ideas of sustainable cities and formalization have crystalized in the contemporary City of Tshwane.

This thesis aims to meet this objective by asking the following sub-questions;

1. How are discourses on sustainability, informality and environmental justice visible in the City of Tshwane?
2. How have these impacted on and potentially transformed sustainable city approaches in cities of the South?
3. Given the growing body of postcolonial urban scholarship urging us to rethink our approach to cities of the global South, how do we reconcile our understanding of sustainability, informality, and justice in southern cities?
4. In what way does the Urban Political Ecology and a situated Urban Political Ecology help us in this endeavour?
5. What urban governance rationalities played out from apartheid policies, and how have they informed urban development in the contemporary city of Tshwane?
6. What is the sustainable city approach in Tshwane? And how is the sustainability, environmental justice and informality intersection articulated in those discourses?
7. How has formalization found expression in South African urban governance?
8. How has permanency emerged as a logic to rationalise formalization in Tshwane? What kind of governmental rationalities and local urban actors have derived from permanency?
9. How does permanency help us to rethink environmental justice?

This study draws its theoretical grounding from postcolonial scholarship, particularly 'southern theory' (Connell, 2007). Southern theories seek to dislocate dominant northern discourses in knowledge production. The burgeoning Urban Political Ecology (UPE) scholarship have made inroads in challenging the northern hegemony in the processes of space production, mainly arguing that there is

a need to interrogate the power relations underpinning such processes (Ahlborg & Nightingale, 2018; Tzaninis et al., 2021). The power dynamics of governance rationalities have been brought to the spotlight by others, including Rose & Miller (2010), who argue that “*modern political rationalities and governmental technologies are shown to be intrinsically linked to developments in knowledge and to the powers of expertise*”(p:271). Foucault’s (Foucault, 1991) notion of governmentality has made it possible for us to study how power is rationalized in governance discourses through a neoliberal frame. However, Lawhon et al. (2014) and other southern theorists have already started by calling for an even more situated understanding of knowledge, power and the environment. Situated UPE (Lawhon et al., 2014) urges us to shift from this narrow Marxist conception of power. Instead, situated UPE urges us to consider variegated forms of power, considering people as infrastructure and starting with examining everyday practices (Lawhon et al., 2014). For instance, Lawhon et al., (2014), following in (Simone, 2004, 2021), argue this through highlighting residents’ city-making practices, including the questions of how the city is made to work and how people scale themselves through networks to access recourses and opportunities. Such criticisms have been reiterated by the need to interrogate the application of northern theory inspired policy tools to southern cities. Following on the work of these critical scholars, I was persuaded to examine how governance ideologies of the sustainable city and formalization/environmental justice crystalize in southern cities, a consideration which has thus far escaped post-colonial analysis.

In turn, this research hopes to contribute to the existing literature a more localised understanding of how sustainable urban governance rationalities are grounded in southern cities. My contribution attempts for a conceptual shift as I foreground the two notions of formalization and permanency. Formalization is a housing policy objective that seeks to address land and housing tenure deprivations in informal spaces. Permanency, on the other hand, is a concept I use to frame the local understanding of formalization in Tshwane. There are two main reasons why I take permanency into account when looking at formalization. First, the unfolding of formalization in the City of Tshwane - through the idea of permanency – became an opportunity to produce discourses that contribute to alternative theories. This contribution seeks to promote more situated understandings of environmental justice and urban sustainability in southern cities, in this way allowing us to inform not only postcolonial scholarship but also urban theory. Second, applying permanency to trace formalization is novel research, because it shifts us from the habitual urban theory of understanding the production of marginalized spaces as caused by the ‘other’. Scholars working with neoliberal governmentality have been exploring how the rationale of state’s power lies with the manipulation of the subject formation. Fletcher (2010), for instance, frames ‘neoliberal environmentality’² to reconcile neoliberal processes of environmental production and subject formation.

Subject formation and the processes of space production have entered Southern debates. Local scholars, for example Dixon & Ramutsindela (2006), have raised critical questions about the nature and relevance of environmental justice targeted processes of formalization, and how they fail to address the agency of its beneficiaries. Here, Dixon & Ramutsindela (2006) argue that environmental justice should rather shift its focus to the political agency of the informal dweller. However, following

² Fletcher (2010) describes an ‘environmentality’ aimed at the creation of ‘environmental subjects—people who care about the environment’.

formalization in Tshwane through the idea of permanency goes further and allows for an innovative way of understanding the production of environmentally unjust spaces. These spaces are produced by the state-produced political subjects – the permanent dwellers – whose agency is embodied in the ability to take responsibility not only for constructing their housing infrastructure, but equally for the development for the environment.

Finally, for discourses on formalization at a national level, these two moments of permanency have policy relevance. As I will indicate in the proceeding chapters, formalization is a national housing policy objective in South Africa. This means that the formalization of informal spaces is a policy concern that expands beyond the borders of the City of Tshwane. Considering the misrecognition and its environmental implications in relation to permanency is important given its policy implications. In the end, tracing formalization in Tshwane through permanency produces scientific knowledge that is beneficial not only to southern theories, but also for those who encounter formalization as policy object, a process or policy programme.

1.3 Permanency in Phomolong and Jeffsville, a moment for rethinking environmental injustice

Phomolong and Jeffsville are two informal settlements that have experienced harsh environmental incidences in the contemporary City of Tshwane. Figures 1.1 and 1.2 capture the context of the environmental injustice in Phomolong and Jeffsville. In 2012, a water supply pipe³ burst in Phomolong, leaving many destitute. Media reports⁴ indicated that hundreds were affected, several were injured, and two children died. In 2017 it was Jeffsville's turn, a sinkhole⁵ occurred at the settlement. Various newspapers⁶ reported that this massive hole endangered the lives of about 45 families. These incidences are rarely seen as environmental injustices by the authorities. Instead, informal dwellers are often condemned for these situations. While the reality of those accusations is debatable, they nonetheless obscure, from the debates, the socio-historical impact of apartheid land laws as well as the failing land policies of the state.

Nevertheless, in both these informal settlements, the local authorities responded by relocating those affected to safer places located on vacant City-owned land. The affected in Phomolong were relocated to Marikana, while those from Jeffsville were relocated to Bremmer⁷ and later to Mashollaville. Relocations are a key component of formalization⁸, a national housing policy objective in South Africa that seeks to address unjust environmental conditions in informal spaces through the upgrading of tenure and basic services infrastructure such as water, sanitation, housing. The City of Tshwane adopted its formalization programme in 2013 (City of Tshwane, 2013c). While these plans are already in motion, many of the City's informal settlements remain unformalized. Plans to relocate Jeffsville are in place. However, the City's ongoing land politics have triggered delays and postponed these plans. As a result, the people of Jeffsville are in *waiting*. Phomolong, on the contrary, started its formalization process in 2014. The process has, however, also been slowed down by land issues, detailed discussion unfolds in Chapter 4. Some of the dwellers have received their permanent spaces, some have been relocated to other areas around Mamelodi and others are in *waiting*. In the meantime, those waiting⁹ for formalization continue to live in environmentally unjust spaces, misrecognised as environmental delinquents. Meanwhile, those with permanency are also assuming responsibility for their environment. This burden of permanency and the attempts to conceal them is one of the central themes of this thesis.

³ This is a massive pipe that runs through the settlement. The pipe is operated by Randwater, a provincial water body authority, that supplies water to various areas in the eastern side of Tshwane. Informal dwellers built their homes on top of this pipe.

⁴ <https://www.news24.com/News24/100s-evacuated-after-pipe-bursts-20120820>

⁵ Jeffsville is built on dolomitic soil, which is prone to sinkhole formations [<https://www.pressreader.com/south-africa/pretoria-news/20130725/281659662656220>].

⁶ <https://www.iol.co.za/news/south-africa/gauteng/45-families-evacuate-homes-after-sinkhole-scare>.

⁷ The relocated were faced with fatal racial tensions in Bremmer, hence they were moved to Mashollaville. I visited their new area during my fieldwork. <https://www.dailysun.co.za/News/National/race-clash-over-shacks-20170129>

⁸ Formalization aims at insitu upgrades, relocations are a last resort (NUSP). National Upgrading Support Programme (NUSP) is a government programme setting guidelines for formalization <http://thehda.co.za/index.php/home/nusp>

⁹ Other sinkholes occurred around the settlements following the one of January 2017. In 2019, a car was swallowed by a sinkhole [<https://www.dailysun.co.za/News/car-drops-into-hole-20191230>]

When I started my PhD in 2017, the idea of permanency was never a thematic interest, it emerged with fieldwork. I was interested in understanding formalization and environmental justice through the lens of waste governance in informal spaces. My fieldwork commenced with a desktop pre-acclimatization exercise, incited by the desire for a deeper understanding of the study phenomenon. This entailed perusing media archives for reports on the abovementioned environmental incidents in Phomolong and Jeffsville. The concept of environmental justice is used to reflect the racial discrimination of minority communities through the placement of toxic waste facilities in their neighbourhoods [see box 1.1]. I was mainly intrigued about the question of how metabolic flows in the City - mainly access to waste management services, implicated the sustainability of formalized spaces. But permanency became a common platform on which various voices could express their views on environmental production in marginalized spaces. Thus, tracing formalization through permanency not only captured variegated voices, it also granted me access to the debates of marginalized voices, allowing them to speak about their own understandings and experiences on habitability and production of the environment.

The term environmental justice came to being as a tool for mobilization against racial discrimination. Benjamin Chavis jr was instrumental in the development of environmental justice through his coining the idea of environmental racism. In that context, environmental racism was described as “any deliberate targeting Africa American communities, for sitting of toxic waste facilities, through policy institutions and their enforcement” (Holifield, 2001; Schlosberg & Carruthers, 2010). The growth of the environmental justice movement in the 1990s, instigated shifts to make the concept more versatile and inclusive. (Schweitzer & Stephenson, 2007), for instance, maintains that the term environmental justice incorporates environmental racism and environmental classism. Hence environmental justice avails itself as for mobilizing both with government and activism structures (Agyeman & Evans, 2004). Thus, in this study, I will focus on environmental justice as both a theoretical and a policy concept. Because I seek to understand how environmental justice as a policy idea, directed at governance interventions in environmentally unjust spaces of the South- is theorized in urban studies.

Box 1.1: Delineating Environmental Justice

1.4 Structure and sequence of the thesis

The remainder of this thesis is organized into eight chapters.

In Chapter Two of the thesis, I develop a theoretical argument underpinning the framework of the analysis. The chapter is organised in themes of the three key concepts in my theoretical framework. Starting with [1] sustainability, I offer contextualization of some of the common assumptions in sustainable urban governance. I place a spotlight on the idea of the sustainable city to provide a critique of sustainability in urban governance. First, I propose that the bio-physical conception of sustainability dominates the understanding of sustainable cities. The second critique is that the sustainable city rubric has been mobilised to mediate city diplomacy and politics, in the end implicating how the sustainable city thesis positions the sustainability goal in Southern cities.

[2] The second part tackles the notion of informality, scrutinizing discourses on urban informality and how they have particularly mapped the place of informality within the urban complex. Inspired by Roy's (2011) concept of 'subaltern urbanism'-which arguably brings back the relevance of informality to cities, I set a tone for critical examination of how urban policy interventions - especially focusing on slum free cities [as a prototype for formalization]- envisage a sustainable city as a city without slums.

[3] The following section scrutinizes the environmental justice concept, to interrogate the promise of a slum free city as a 'just' city. The section first looks at the conception of justice, starting with Rawls' interpretation and moves towards environmental justice to develop an argument for why the current conception of justice is not sufficient to address urban challenges in the global South. This argument is then elaborated on through a critique of the northern conception of the environmental problem. The section concludes by proposing that a paradigm shift towards a 'just sustainability' (Agyeman, 2008) can bring environmental justice closer to the challenges of southern urban.

The last section of this chapter presents a theoretical frame of analysis inspired by postcolonial studies and southern theory. Here, I review UPE and Foucault's governmentality as tools to question the northern formed ideas that continue to dominate governance discourses. For wanting to inform urban theory, I locate my work in UPE - understood as an outcome of a provincialized Urban Political Ecology. I take from situated UPE its conception of power and understanding of access. I bring these to develop a nexus- a theoretical frame of analysis constituted by three key concepts to this research-informality, sustainability and environmental justice- through which I seek to approach the formalization /sustainability intersections in Tshwane urban governance.

Chapter Three presents the methodological approach I employed to traverse the fieldwork. Here, I discuss the 'embedded case study' (R. Yin, 1993), because as a research design, it presents an opportunity to trace and capture the complex practice of permanency as it allowed me to approach the formalization from various contexts. Following this, I then move the debate with a discussion of my research process. Being particularly inspired by calls from postcolonial and southern theorists for us to equally rethink how we research cities of the Global South, meant that I needed a methodological enquiry that would enable variegated voices to be heard in the governance processes that shape their living environments. My interest in this research was to make space even for the voices of the marginalized urban governance stakeholders to be heard on debates on environmental production

through a case of formalization. So, my research sought to bridge the gap between the elite and the marginalized urban policy stakeholders. Engaging with permanent dweller identity and those in waiting as research partners yielded some fascinating insights. In closing, I grapple with ethical considerations, mainly reflecting on how my 'insider position' (Turhan & Bernard, 2021) influenced my positionality and, in turn, affected how I conducted the research.

Chapter Four presents how the case of Tshwane offers opportunities to reshape the theoretical debate through its socio-historical specificities, with two goals. First, the chapter provides background, especially for those readers not familiar with the City and its socio-historical background. Second, it sets the context for the nuances of the empirical argument in the thesis. This includes outlining the foundations of the City's procedural and distributional injustices, by contextualising government policies and programmes - past and present - that have shaped the City as an unequal urban centre, and their modalities of production of informal spaces as spaces of misrecognition-environments, identities. This chapter, therefore, mobilizes to situate the City's informal settlements as an intriguing theory-generating site from which to study urban and environmental politics.

Chapter Five then introduces the City of Tshwane's approach to environmental governance, by interrogating the City's vision of being a 'sustainable African city'. It starts by questioning how the idea of urban sustainability was grounded in the City's governance discourses. This exercise includes reflecting on how Tshwane conceptualizes the notion of sustainability in its environmental governance tools and city development strategies. Following that, the chapter traces how the City's established sustainability unit becomes a self-styled promoter and governor of Tshwane's sustainability status. For example, the unit was instrumental in inaugurating and hosting the annual African Capital Cities Forum (ACCSF). Furthermore, the unit enabled the City to subscribe to global environmental governance and politics. That being said, this chapter proposes that governing with sustainability remain a challenge for the City of Tshwane, and also that there is a disconnect between the City's governance of its informality. It demonstrates this problem with an introduction to the environmental cases of the Phomolong and Jeffsville informal settlements. In sum, the chapter seeks to provide background to understanding the nuances of the informality-sustainability nexus in Tshwane, which forms the basis of my empirical argument.

Chapters Six and Seven present the empirical analysis of the data collected during the fieldwork to understand the formalization experiences of various informal settlements in Tshwane such as Phomolong, Jeffsville, Spookpark, Masholaville and Marikana. Chapter Six engages with formalization in its various forms; -as policy objective, as a process of implementation, as a policy product. It starts with a critical analysis of the formalization policy rationale, specifically questioning its deployment as an intellectual technology of governance. It traces how formalization was rationalized as a policy objective. I argue here that even though the narratives on formalization appear to be defined by the post-apartheid pragmatism of addressing tenure deprivations, the shift from the Reconstruction and Development Programme RDP to serviced stands points to the changing face of hegemony. In the next section, I bring to the spotlight the challenges facing the institutionalization of formalization in the City of Tshwane. I particularly focus on land politics and their implications on the formalization process and

society. The final part of the chapter reflects on formalization as a product, through the idea of permanency, as a key theoretical logic for conceptualizing formalization in Tshwane. Furthermore, I argue that through permanency, we can understand housing and environmental politics. I show how the permanent dweller emerges from the idea of permanency, which I argue is the embodiment of a restructured relationship between the state and the informal dweller. In conclusion, the chapter highlights how ambitions for permanency cause aspirant permanent dweller to assume responsibility for the environment, raising questions about formalization and procedural justice.

Chapter Seven builds on permanency and justice, by tracing the production of permanent spaces. Here, I explicate the contradictions of permanency as a tool to redress injustice. This includes laying context about '*misframing*' (Fraser, 2008) of the informal dweller, followed by illustrations of how permanency resets the misrecognition of identities and, at times, modes of impermanency. Furthermore, I highlight how, for those in waiting, the struggle for land tenure is embodied in impermanency. In the last section, I place the spotlight on waste practices in formalizing spaces, to argue that the maldistribution of waste management resources in permanent spaces exposes the misconceptions held about permanent spaces, in Tshwane's imagination of urban sustainability.

I conclude the thesis with Chapter Eight, where I follow a thematic approach to present the theoretical and methodological contributions of this study. I end with a reflection on some of the theoretical dilemmas facing the novelty of permanency as innovation research, before presenting their potential for future direction in research.

CHAPTER 2

Revisiting the ‘Political Moment’ of a City: through intersections of Sustainability, Informality and Environmental Justice

2.1 Introduction

This chapter provides a comprehensive argument of the complexities informing the politics of urban environmental governance. This is not a literature review, rather a theoretical argument where I am weaving together three sets of literature – one on sustainability, one on justice and one on informality. I engage with these concepts on a one-on-one basis, linking them progressively into a nexus as my theoretical argument advances. I argue that applying the nexus to study formalization highlights tensions and contradictions in the environmental politics of spatial imaginaries. Various global environmental governance discourses such as the Sustainable Development Goals (the SDGs), especially the SDG11, have elevated the place of informality in the urban sustainability agenda, with their calls for interventions to address poor living environments and the environmental degradation facing informal settlements. The rise of the formalization (a process of space production) of informal settlements, in cities such as Tshwane has placed the spotlight back on informal settlements as sites for mobilising the politics of urban environmental governance. An interesting observation is that, while urban informality has come to occupy a prominent position in urban sustainability narratives and governance, informality continues to be regarded as an antithesis of sustainability.

Section 2.2 provides a critical examination of the sustainable city logic and its conception of the urban. I start by tracing some of the narratives commonly associated with the ‘Anthropocene’ (Blaser, 2019) moment of sustainable development and sustainability. Following that, I scrutinize how the Anthropocene nature of sustainability finds expression in the governance logic of sustainable cities. In closing off, this section raises a discussion often overlooked yet influential to the practice of urban diplomacy in the sustainable city discourses. Here, I seek to critically engage with the outward approach of sustainable cities. In keeping with the sustainable city paradigm, section 2.3 pulls into the debate informality and its place in the urbanization of the environment. Here, I walk between conventional and subaltern discourses on informality to critically observe how informal spaces are discursively used as a site of dispossession and allocation in the sustainable city spatial logic. I draw parallels from Roy’s (2014) debates on ‘Slum-free Cities’, which contributes to the renew spatial representation of subaltern spaces in the ‘sustainable’ urban. I use these debates to tease out the contradictions in the environmental politics of the ‘cities without slums’ governance logic. Furthermore, in section 2.4, I raise the element of environmental justice, by posing the question of whether a city without slums can be a ‘just’ city, considering the narrow emphasis of environmental justice on distributive justice, meaning material deprivation. I interrogate the justice of environmental justice, by questioning its current framing of the environmental problem in racial terms. Inspired by

the 'postpolitical' (Swyngedouw, 2009) argument, I end with intersectional complexities of environmental justice and sustainability in governance processes, reflecting on their 'postpolitical' implications for environmental governance interventions directed at informal spaces.

In the concluding section of the chapter, I bring the three key concepts – informality, sustainability and environmental justice – into a governance nexus, in order to critically engage with how the rationality of formalization unfolds in the City of Tshwane. I first examine the research field of Urban Political Ecology (UPE), which helped bring to critical urban studies a new vision of the traditionally understood city as a product of a global 'metabolic socio-environmental process' (Heynen et al., 2006). I demonstrate how the evolution of the term 'UPE' to 'situated UPE' allows for the highlighting some of the central concerns of Southern research. I end by proposing ways in which a situated UPE contributes to the theoretical grounding of this nexus, and the analytic consequences this holds for approaching formalization and its governmental logics on the City of Tshwane.

2.2 The Anthropocene moment of Sustainability

Sustainability has been widely studied, yet there remains a paucity in the common understanding of its definition. Hence, for a greater conceptual clarity, there is value in taking up the discussion to define the idea of sustainability. Several fields have contributed in the articulation of the universal definition of the concept of sustainability. Authors in social sciences, for example, define sustainability as “the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of the ecosystems” (Agyeman et al. 2002; Agyeman et al., 2003; Kuhlman & Farrington, 2010).

Emerging from these definitions is a perspective of the immense inclination of sustainability towards environmental protection. This environmentalist dimension underpinning sustainability can be arguably attributed to the concept’s historical origins in the forestry sector, which was driven by the concerns about the over harvesting of natural resources (Wiersum, 1995). This environmental conservation inclination towards sustainability is also captured by Harold Hotelling, in his 1931 scholarship, from which he illustrates how the concerns of the wasteful consumption of natural resources gave rise to the conservation movement. This conception of sustainability is helpful to understand the persistent conservation¹⁰ inclination framing of sustainability in governance discourse.

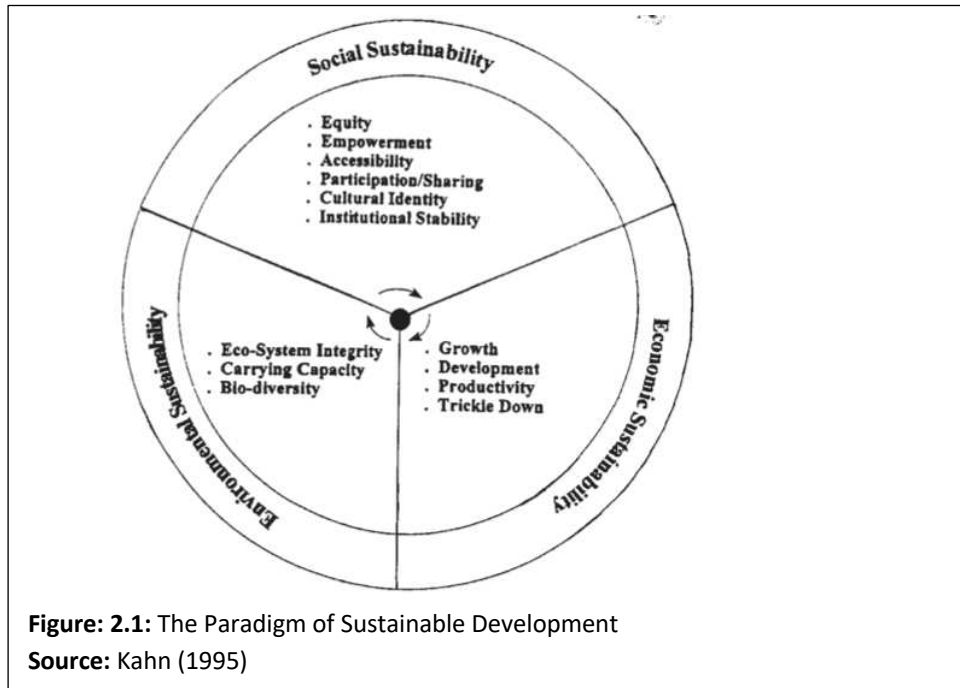
The application of sustainability has not remained static. The concept has been a subject of policy appraisal and scientific study (Kuhlman & Farrington, 2010), as a result the concept’s meaning has evolved. Talks about the expansion of the concept’s definition to embrace other sustainability related social concerns, outside its ecological origins, were in tandem with its evolution. While environmental concerns remain important, Agyeman et al. (2002), for instance, have argued that:

“Sustainability.....cannot be simply a ‘green,’ or ‘environmental’ concern, important though ‘environmental’ aspects of sustainability are. A truly sustainable society is one where wider questions of social needs and welfare, and economic opportunity are integrally related to environmental limits imposed by supporting ecosystems”(p:78).

As illustrated in figure 2.1, the new outlook on sustainability places a focus on the economic and social dimensions of sustainability. Economic sustainability: seeks the sustainability of the economic system itself, by emphasising the maintenance of production that satisfies present consumption levels without compromising future needs (B. J. Brown et al., 1987; Johnston et al., 2007; Owens, 2003). Social sustainability on the other hand, encompasses the notions of equity, empowerment, accessibility, participation, sharing, cultural identity, and institutional stability. It seeks to preserve the environment through economic growth and the alleviation of poverty (Basiago, 1999; Dempsey et al., 2011; Zeng et al., 2016; Jones, 2017). Lastly, environmental sustainability involves ecosystem integrity, carrying capacity and biodiversity. It requires that natural capital be maintained as a source of economic inputs and as a sink for wastes. Resources must be harvested no faster than they can be regenerated. Wastes

¹⁰ Fletcher (2010) Conservation has often been described as a form of ‘green’ governmentality intended to inculcate an environmental ethic by means of which people will self-regulate their behaviour in conservation friendly ways.

must be emitted no faster than they can be assimilated by the environment (Kahn, 1995; Jonas & Ward, 2007).



While the broadening of the sustainability mandate is welcomed, it also draws questions on the contradictions present among the three pillars of sustainability. Various authors have raised numerous criticisms in this regard, especially regarding conflict between the competing interests (Campbell, 1996), thus instigating calls for a balance between the different dimensions of sustainability, as suggested by Dempsey et al. (2011). The main contention by Dempsey et al. (2011) is to safeguard against social sustainability coming at the expense of economic or ecological sustainability. On the other hand, Kuhlman & Farrington (2010) bring their critique to the distinction between the three pillars of sustainability, which they argue is 'conceptually fuzzy' (Campbell, 1996; Kuhlman & Farrington (2010). In their view, this distinction is problematic in three ways (a) obscures the real contradiction between the aims of environmental conservation and welfare for all; (b) risks diminishing the importance of the environmental dimension; and (c) separates the social from the economic aspects, which in reality are one and the same.

Authors including Gunder (2006), have suggested that the three pillars of sustainability accommodate a wide range of contestable discourses, each vying to articulate its definitive meaning (Gunder, 2006). To be precise, Gunder (2006), has criticised sustainability for being a "catchall term for many of humanity's diverse environmental concerns and responses" (p:209). The biggest obstacle for sustainability, in Gunder's view, is that it overstretchers itself without accomplishing much. Articulating this argument, Gunder states that the limitations of sustainability is in its poor focus on issues of the maintenance of the biosphere, the natural-resource depletion or the loss of biodiversity, nor does it address the needs of the disadvantaged.

Above this critique and these structural limitations, we also need to take to heart the environmental focus between the three dimensions defining sustainability. I find these dimensions to points to sustainability as persistently working for the environment. Meaning that, despite the broadening of its dimensions, sustainability continues to be misconstrued as merely an environmental doctrine (Basiago, 1999: 149). Echoing these sentiments is Agyeman (2008), who points out that environmental sustainability or environmental stewardship is at the centre of current theorizing and activity on sustainability and sustainable development (Agyeman, 2008). Apart from the fact that shaking off this conservationist approach is not without its challenges, as chapter 5 of this thesis shows, the sustainability rationale in the City of Tshwane remains deeply embedded in environmental concerns.

These arguments on the tensions between the three pillars of sustainability draw our attention to the need for a paradigm shift towards a 'reconciled development and the environment' (Kuhlman & Farrington, 2010: 3438) in a more equitable manner. The Brundtland report of 1987 was instrumental in advancing this reconciliation of development and the environment. As noted by Kuhlman & Farrington (2010), commission concerned itself with the question on "*how can the aspirations of the world's nations for a better life be reconciled with limited natural resources and the dangers of environmental degradation?*" (p: 3438). The response to that question rested in the report's crystallisation of the concept of sustainable development (Bulkeley & Betsill, 2005). Some, including von Schirnding (2005) for instance, have also taken up debates arguing that sustainable development was coined as part of an effort to bring environmental issues into the mainstream of development. Dempsey et al. (2011) see it as the other way around, arguing that sustainable development as a concept was developed alongside the acute awareness that the ecological destruction of the 1980s 'retreated from social concerns'¹¹.

Nevertheless, sustainable development was solidifying the growing global consensus about the need for urgent intervention to curb the ecological destruction, framed as the 'Anthropocene'¹² (Blaser, 2019; Lorimer, 2015; Ruddick, 2015). Because the Brundtland Commission's framing of sustainable development emphasises the need to achieving intra-generational justice¹³, to eliminate poverty without imposing unfair obligations on future generations -inter-generational justice¹⁴ (Adelman, 2013, p. 29).

The seminal definition of sustainable development, as conceptualised by the Commission, is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987:40). This affinity to a sustainable development is,

¹¹ Those economic approaches 'manifested as poverty, deprivation and urban dereliction that blight many parts of the world – are Untenable' (WCED, 1987, p. xi).

¹² The Anthropocene pursues the argument that the world is in clear and present danger and urgent, sustained and consensual action is required. Swyngedouw (2009). *The Paris Agreement on Climate is a recent global consensus* [<https://www.un.org/en/climatechange/paris-agreement>]

¹³ Intragenerational justice-global justice between different people of the present generation (Baumgärtner & Sievers-Glotzbach, 2012). While for Catton and Dunlap (1978) intra-generational equity' – equity or social justice now.

¹⁴ Intergenerational justice "justice between people of different generations (Baumgärtner & Sievers-Glotzbach, 2012). For Catton and Dunlap (1978) 'inter-generational equity' – equity to as yet unborn generations.

in the words of Vallance & Perkins (2010), encouraged by *“our newfound appreciation of planetary finitude”* (p:449), which I argue resembles the approach of sustainability.

So then, what has shifted? There exists a thin divide between the concepts of sustainability and sustainable development. Although sustainability is often deployed simply as an ideological tool (Žižek, 1989), at the same time, Marcuse (1998) considers sustainability as concept and a slogan. Agyeman et al. (2002), for example, considers sustainable development as an action-oriented variant of sustainability. To Agyeman et al. (2002), this close association has created a grey area in terms of what sustainability should actually mean. In my view, sustainable development is a response to the global environmental crisis framed by sustainability. This means that, discourses on sustainable development attempt to reinforce the consensus on the urban way of life, already established by the idea of sustainability through its explicit attention to the rights of the future and present generations.

Sustainable development has become implanted as a popular logic of governance following on the inclusion of sustainability as a policy principle (Bulkeley & Betsill, 2005) in this era of the Anthropocene (Ruddick, 2015). In the following sections, I will reflect on how sustainability found expression in policy and governance discourses through sustainable development. Furthermore, I will show how the rise in urban governance gave footing to the neoliberalization of the urban, which I further argue is reflected through the sustainable city paradigm lending itself as a conduit of urban diplomacy. My argument is inspired by the post-political scholars, Swyngedouw (2009) and Kaika & Swyngedouw (2012), who argue that Anthropocene having been brought to the public eye implies an emptying out of politics and a disavowal of the inherently conflicting pursuit of different visions about the right way to live on Earth. I am by no means seeking to downplay the global environmental problem, especially considering the effects of global environmental crisis on the living conditions of the poor. Rather my contention is with the exclusionary framing of the urban influenced by the Anthropocene moment.

2.2.1 Sustainable development/sustainability in policy and governance discourses

Over time the concept of sustainability gained significant traction as a key object in policy discourses. At the beginning of the 21st century various countries, including South Africa, adopted sustainable development as a national policy objective (see the National Sustainable Development Framework, 2008). In the OECD countries a consensus was reached on how urban policy should look like to accommodate sustainability issues¹⁵. Global cities followed suit, mimicking the sustainable policy ideas of the global North. For instance, in 2008 South Africa adopted the National Framework for Sustainable Development¹⁶, which sets the strategic guide for the country's sustainability governance [see box 2. 1]. The recognition of sustainability as a policy principle in the public administration space has been widely attributed to the Brundtland Report¹⁷ of 1987 (Kuhlman & Farrington, 2010), especially through its action-oriented variant sustainable development (Agyeman et al., 2002). However, the rise of sustainability governance has been a steadily maturing contradictory process. The work paving way for situating sustainability in public policy discourses can be traced as far back as the early 20th century. In particular, the 1931 theory on the optimal rate of exploitation of non-renewable resources, by American economist Harold Hotelling (1931), set during a period of the 2nd industrial revolution, provided some valuable insights on this progression. As illustrated by Hotelling (1931), the intense extraction of raw materials at that time instigated the proposed measures to regulate and curb the exploitation of nature. Proposed interventions put forth in this regard were mainly directed at abating the wholesale devastation of irreplaceable natural resources. For example, regulatory mechanisms such as imposing taxes were implemented to discourage production at certain times and in certain regions or to hamper production by insisting that obsolete and inefficient methods be continued (p:37). This approach points to an ecological inclination in which the control of sustainability was ushered into governance debates. Proponents of social sustainability usually question the efficacy of sustainability in governance on these ecological bases¹⁸.

A Marxist-neoliberal criticisms also haunts sustainable development governance. These include the contention of neoliberal inclination of sustainable development, what Theodore & Peck (2012) frame as 'the neoliberal turn in urban policy'¹⁹. Here, the main contention is with the ease with which sustainable development opens itself as a tool for serving neoliberal manipulation. For instance, (Sachs, 1999; Bond, 2002) have noted how the idea of sustainable development has allowed itself to

¹⁵ *Cities for the 21st century* was published following the OECD International Conference on the Economic, Social and Environmental Problems of Cities. This 1992 gathering of urban policy makers was convened to explore two fundamental issues: "what urban policies should be, and how those policies should be developed and implements (OECD, 1994:7).

¹⁶ <https://www.environment.gov.za/sites/default/files/docs/2008nationalframeworkforsustainabledevelopment.pdf>

¹⁷ The Brundtland commission met in 1987, with the mission to unite countries to pursue sustainable development together. Chaired by Gro Harlem Brundtland, the former prime minister of Norway. Cities became an important application of sustainable development. The focus of the report on the integration of economic, social and environmental concerns, together with global and local issues, made cities a key arena in which the concept of sustainable development could be applied (Bulkeley & Betsill, 2005).

¹⁸ See page 3 above

¹⁹ *Neoliberal urbanism has been marked by the proliferation of various forms of state-mediated market rule, by privatized and contractualized governance, and by widespread subordination to competitive logics*

be incorporated into neo-liberal approaches. In their view, sustainable development is actually about sustaining development, meaning manipulating the environmental to ensure continuity of development. Gunder (2006) for one, reminds us that sustainability, an ideal societal goal in itself, is captured and embodied by ecological modernization's sustainable development.

While contrarily, for Žižek (1989) sustainability often is deployed simply as an ideological tool to anchor or quilt the discourse as an unassailable object of desire and importance. Advancing similar reasoning, Haughton and Counsell (2004) elaborate that sustainable development avails itself as vehicle for political resource or tactic, capable of co-option to particular legitimate policy approaches.

Posing a different view Marcuse (1998) argues that sustainability hides rather than reveals unpleasant facts. Furthermore, its calls for our response in the environmental challenges conceals the actual causes of problem. In his view, calling for sustainability undercuts the real reform, suggesting that 'manipulation of urban society' (Gabriel, 2014). Marcuse's critique of sustainability revivates that from the political ecology. As I already mentioned, critics of sustainable development fault it for its metaphoric universalization of a particular demand (Swyngedouw, 2009). Here, the contention is with how the Anthropocene problematises the environmental disruption in universalised ways.

These observations, in my opinion, remain current as they bring to surface the politics underpinning sustainability governance, which stifled potential for substantive social and environmental change (Gunder, 2006). The political ecology critique is particularly relevant to my study as it teaches us about the politics of environmental governance. It has shown how the apocalyptic view of the urban, which I will turn to in the next section, has shaped the place of the informal spaces in the spatial imaginaries of sustainable governance. That being said, what is missing from the criticisms of sustainability governance are the reflections on the implications of the idea of sustainability in policy discourses of the global South. For instance, while the Sustainable Development Framework interacts with informal spaces, through its goal of sustainable human settlements, it largely employs apolitical interventions.

National Framework for Sustainable Development

- Purpose of the Strategic Framework for Sustainable Development
- How will the Framework be used?
- Key components of the Framework
 - National vision for sustainable development
 - Trends
 - Priority areas for strategic interventions
 - Making it happen
- Conclusion

Purpose of the Strategic Framework for Sustainable Development

The purpose of this Framework is to enunciate South Africa's national vision for sustainable development and indicate strategic interventions to re-orientate South Africa's development path in a more sustainable direction. It does not present detailed strategies or actions, but rather proposes a national vision, principles, trends, strategic priority areas and a set of implementation measures that will enable and guide the development of the national strategy and action plan.

It describes in broad terms how the existing activities of government and its social partners will be strengthened, refined and realigned in a phased manner to achieve inter-related sustainable development goals relating to the economy, society and the environment, and how governance systems will be capacitated to facilitate this process.

This Framework provides the basis for a long-term process of integrating sustainability as a key component of the development discourse and shows South Africa's commitment to the principles developed at international summits and conferences in the economic, social and environmental fields, including the 2002 World Summit on Sustainable Development.



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How will the Framework be used?

The Framework will be used by all social partners and all organs of state within the national, provincial and municipal spheres to progressively refine and realign their policies and decision making systems in order to establish a coherent and mutually consistent national system aimed at promoting sustainable development.

This process will be facilitated by the development of a coherent set of sustainable development indicators; making investments in capacity building, research and development and information technology; and by the development of a national sustainable development strategy which identifies and prioritises specific government interventions.

Key components of the Framework

A national vision for sustainable development

The notion of "sustainable development" is often used in policy and strategy documents to refer to many different things, but it is rarely defined to mean anything specific. We are now obliged by our international commitments, constitutional principles and statutory laws to justify our national policies and development strategies in terms of sustainable development.

Our vision gives effect to the notion that sustainable development should be "an integration of governance, multiple voices, processes and action in decision-making towards a common goal within set parameters and a common definition of policy choices for promoting a sustainable development agenda.

The national vision for sustainable development is as follows:

- Vision

South Africa aspires to be a sustainable, economically prosperous and self-reliant nation state that safeguards its democracy by meeting the fundamental human needs of its people, by managing its limited ecological resources responsibly for current and future generations, and by advancing efficient and effective integrated planning and governance through national, regional and global collaboration.

The Framework became an overarching guide for all social partners and all organs of state within the national, provincial and municipal spheres to progressively refine and realign their policies and decision-making systems in order to establish a coherent and mutually consistent national system aimed at promoting sustainable development (National Framework for sustainability)

Box 2.1: The National Sustainable Development Framework

2.2.2 The rise of sustainable cities, crystalizing the neoliberal urbanism

The shifting of sustainable development as a function of local government was a moment of solidifying the environmental imaginary (Gabriel, 2014) of sustainability in processes of urban governance. This incorporation of sustainability in processes of urban development was, as suggested by Theodore & Peck (2011), poking holes at the conventional government practices at local government. I also argue that such debates were mainly setting the scene for the rationales in urban governance. What has emerged is that, not only are cities recast as a key arena in the new sustainability agenda (Satterthwaite, 1997; Bulkeley & Betsill, 2005) but the idea of urban sustainability has become an alluring goal for many cities (Vallance & Perkins, 2010). This urbanization of sustainability (Vallance & Perkins, 2010) has seen the cities in the 21st century overtaken by the idea of sustainable urban development, to the extent that, as suggested by Vallance & Perkins (2010) *sustainability has come to define the raison d'être of cities*. The reclaiming of cities as a conduit of sustainable development found audience in global governance narratives. The European Commission of 1994, for instance, framed discourses on sustainability in ways that suggests that local governments are key stakeholders in the delivery of sustainable development. It is therefore not surprising that sustainability has become pervasive as a proper goal to urban development for many cities (Basiago, 1999; Briassoulis 1999; Vallance & Perkins, 2010).

- **Rise of sustainable city paradigm**

Perhaps the most significant outcome of the neoliberal urbanism, following the publication of the 1987 Brundtland Report, was that a prerequisite for sustainable development gave rise to sustainable cities an organising logic for urban development. As noted by Bulkeley & Betsill (2005), the global pervasiveness of the concepts of sustainable cities and urban sustainability can be attributed to the report. The rise of sustainable cities, as part of the global environmental governance ideals, advanced the narrative of sustainable development in local governance. This is evident in the definition of a sustainable city against the background of sustainable development, defined as a 'city that contributes effectively to the global aims of sustainable development' (Houghton, 1999). Furthermore, the argument by the Climate Reality²⁰ Project states that creating sustainable cities is essential for achieving sustainable development, which seems to suggest the sustainable city lends itself to sustainable development. Considering the anthropocene nature of sustainable development, it is not surprising that the sustainable city discourse often describes cities as having unsustainable futures. I therefore, concur with Ruddick (2015) that the emergence of sustainable cities was *"truism of the urban both as problem and a cure for Anthropocene climate change"*(p:1115).

Policy strategies directed at urban adaptability in a changing global environment lend themselves to the spatial environmental imaginaries. As contended by Scott & Storper (2015), how the 'urban

²⁰ Climate Reality Project: <https://www.climaterealityproject.org>.

question²¹ is interpreted at a particular time, is often a reflection of the *“changing watchwords²² that circulate through the literature in successive attempts to capture particular spatial or temporal conjunctures of urban development”* (p:3). The rise of environmental governance (Death, 2011) ushered in environmental government models such as smart growth cities and compact cities. Typical compact cities highlighted by Pamer (2019), include cities such as Vienna, which is characterized by significantly high population densities, high public transport usage, and correspondingly lower per capita emissions. Cities such as San Francisco and Singapore have gained tremendous attention and renown as the most outstanding smart cities (Hayat, 2016). What differentiates these cities is their use of information and communication technologies (ICT) leading to a more intelligent and efficient use of resources (Hayat, 2016). While these urban imaginaries are widely considered key to environmental governance, they show a pro-nature inclination towards sustainability. As part of these spatial tropes, the idea of sustainable cities, I argue, not only promotes the ecological inclination of sustainability in environmental governance, but it is also laden with discourses around power relations in its framing of the urban.

Thus, reflecting on how sustainable city paradigm approaches the idea of urban sustainability might help us learn what constitutes a sustainable city. Dominant sustainable city discourses frame urban sustainability in ecological terms, as seeking to preserve ecosystems, reducing pollution and re-using or recycling wastes, protecting the urban periphery from development as well as reducing energy consumption (Vallance & Perkins, 2010). This conception of urban sustainability points to bio-physical environmental goals (Vallance & Perkins, 2010) and an apolitical understanding of sustainability. This means that the sustainable city paradigm considers sustainability as a scientific rather than a political problem (Vallance & Perkins, 2010).

This bio-physical conception of the urban sustainability poses a challenge in the conception of the urban ontology (Amin, 2007; Schatzki, 1991; Vallance & Perkins, 2010). The problem with this conception of sustainability is that it approaches the city as a passive object. In this approach the city’s human inhabitant, and their rights, are undermined by a discourse of bio-physical environmental attributes or built form (Vallance & Perkins, 2010). Reflecting on such conception of the urban can help bring attention to how the spatial imaginary of contemporary cities such as Tshwane, which pursues sustainability as part of the environmental governance, is rationalized.

The exclusionary nature of this Anthropocene-inspired spatial imaginary of the sustainable city paradigm is contradicted by theorizations of space – the Spatial Triad (Watkins, 2005) by Lefebvre and Third Space (Soja, 2009), which approach space as complex and integrated. These considerations of space argue that space is also a social construct. For instance, Lefebvre’s spatial Triad [see table 2. 1]

²¹ The notion of a distinctive ‘urban question’ was first popularized through Manuel Castells’ (1972) influential work in the early 1970s. In his classic work, *the urban question* (1972), Castells critiqued the Chicago school of urban sociology for its failure to grasp the historical specificity of the urban form under capitalism (Brenner, 2002: 363).

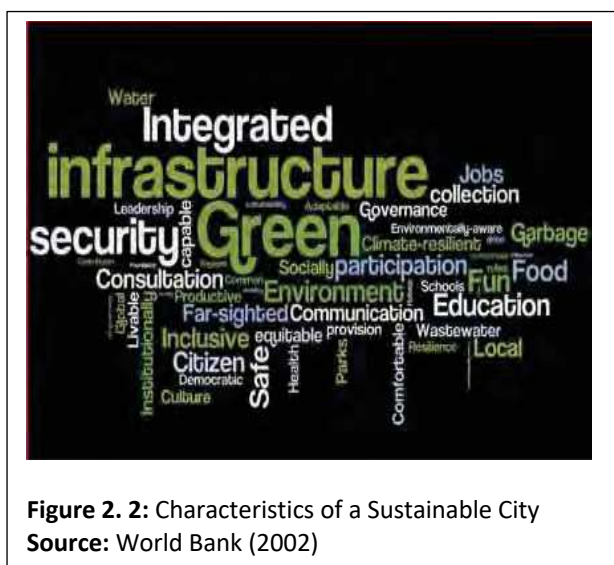
²² These include “Terms like captive cities manipulated cities, postmodern cities, insurgent cities, consumer cities, cities as entertainment machines, the carceral city, the neoliberal city, the fragmented city, the dual city, the digital city, the global city, and the creative city, among many others” (Scott & Storper, 2014: 3)

contemplates the ability of social, physical and mental spaces to provide an integrated view of organisational space (Dhananka, 2016; Watkins, 2005).

Spatial Practice (Perceived Space)	Conceived Space	Lived Space
<p>'Spatial practice of a society secretes that society's space. 'Spatial practices give structure to everyday activities within the wider socio-economic context. It ensures continuity and a certain degree of cohesion for a 'guaranteed level of competence and a specific level of performance' of every society member's social relationship in space. To Lefebvre, spatial practice can be likened to 'perceived spaces' – it is revealed through the deciphering and decoding of its space.</p> <p>Lefebvre argues through the spatial practice of <i>“a specific place we can learn about how that space is produced because it is a space where the reproduction of social relations is predominant”</i>.</p> <p>Dhakana (2016) the effects of governmentality and the changes it brings in the target’s lives shapes perceptions of community</p>	<p>Conceived space (representations of space) is tied 'to the relations of production and the "order" [of the market and of the state] which those relations impose' and is 'the space of scientists, planners, urbanists, technocratic subdividers and social engineers ... all of whom identify what is <i>“lived” and what is “perceived” with what is “conceived”</i>'. This is the dominant space in any society (or mode of production)'. Dhakana (2016) within techniques of governmentality, representations of space are defined within the geographical purview in which policy targets are situated and to which the benefits pertain</p>	<p>Contrary to the dominant space is the lived space (representational space), the space of the everyday, the dominated and hence passively experienced space which the imagination of its 'inhabitants' and 'users' seeks to appropriate and change.</p> <p>Dhakana (2016) to articulate the effects of governmentality with spaces of representation is to decipher the changes in the lives of the individual targeted by policy</p>
<p>Table 2.1: Lefebvre’s Spatial Triad Illustration: Author (2020)</p>		

To challenge this bio-physical and singular spatial logic dominating the ontological status of the city (Vallance & Perkins, 2010; Zukin, 2011), imagination of the cities would entail equal challenging of the urban sustainability discourses. The starting point here might be to dislocate the discourses and ideologies embedded in the Western conception of urban sustainability. Bulkeley & Betsill (2005) remind us that the governance of urban sustainability is being conducted by various elements including multiscale coalitions of state and non-state actors, advocating for particular discourses of urban development. I wish to cast focus on the international agencies and multilateral institutions, including the UN and the World Bank, which, have somewhat been instrumental in shaping the narrative on sustainable cities (Theodore & Peck, 2012). The World Bank’s partnership report of 2013 on ‘Building sustainability in an urbanizing world’, highlights the influence of these institutes promoting sustainable development in cities through the provision of knowledge and tools. Figure 2. 2, exemplifies how the institution imagines a sustainable city.

Furthermore, the report highlights the role of transnational agencies and municipal networks, including the C40 cities²³, ICLEI²⁴ and UCLG²⁵ [see Chapter Five for further discussions on these networks], and their implications on environmental governance discourses. As I will demonstrate, these networks set the agenda for sustainable cities, through the exchange of best practices, peer-to-peer learning, and collaborative development of innovative approaches toward sustainable cities. While these are noble activities, discourses on urban sustainability draw on considerations of global issues casting their frame of reference in Northern perspectives, where ‘modernization’ has matured. For instance, *“the threat of climate change is frequently invoked as part of the rationale for moving towards energy conservation in the urban arena”* (Bulkeley & Betsill, 2005: 48). This makes assumptions that everyone has access to energy supply.



In closing, the consensus on the growing urgency for sustainable urban development has also accelerated the renewed need for cities of the South to pursue urban sustainability, as a part of this urban imaginary (Helmy et al., 2008). In consequence, circulation of sustainability discourses to the global South has been included in classical development discourses. However, considering the seemingly bio-physical framing of sustainability, it is not surprising [as I demonstrate in Chapter Five] that places like the City of Tshwane have adopted an environmental protectionist approach to the idea of sustainable cities. I argue, therefore, that there is need to interrogate the ideological elements that travelled with the idea of sustainable development as it filtered to the global South. This is particularly important considering that, as argued by Briassoulis (1999), the quest for sustainable development will remain an item on the political agenda for a long time. Nonetheless, urban governance initiatives such as sustainable cities have, for long, been critiqued as much as they have been lauded for their role in urban transformations.

²³ C40 Cities Climate Leadership Group

²⁴ ICLEI Local Governments for Sustainability

²⁵ UCLG United Cities and Local Governments

2.2.3 Sustainable cities complex in urban diplomacy

Not only is sustainability the local government's responsibility, but it is also a chosen concept part of local governments' urban branding strategies (Helmy et al., 2008). The notion of the sustainable city has become the link between 'place branding'²⁶ (Boisen et al., 2011; Govers et al., 2017; Ryan & Mizerski, 2010) and sustainability. For instance, some of the cities have chosen to use urban sustainability as a territorial marketing tool, in an effort to promote their cities' attractiveness (Helmy et al., 2008). Many local governments are preoccupied with articulating the importance of a healthy environment in terms of economic competitiveness (Hall & Pfeiffer, 2000). According to Acuto & Pejic (2021), this articulation is often in a comparative fashion putting, if not pitting, cities and urban imaginations in relation to each other. For instance, the City of Tshwane positions itself as being among the world's most sustainable cities compared to most of its African peers.

- Sustainable city and Global thinking

As a result, the sustainable city paradigm has allowed itself to be pulled into the global city narrative in two main ways, the first being its service to capitalism. In his book, *Global Cities Governance and Diplomacy*, Acuto (2013) illustrates how cities, positioned as global agents, come to form powerful political forums and strategic alliances around pertinent global issues. Theodore & Peck (2012) link these global issues to global capitalism. To capture these issues, they borrow from the policy statements of the Organization for Economic and Development (OECD), which recast the urban as post-industrial command-and-control centers of globalizing capitalism. This resonates with Clark's (2003) argument that the purpose of existence of world cities is to have them serve as agencies of global capitalism. Thus, in this new imaginary of global urban development (Jessop, 2002), cities have assumed a new position as vital nodes of a capitalist system, shifting from their old identity as social distress and economic dislocation. Acuto & Pejic (2021) urges us to pay particular attention to the power dynamics underpinning the global city (Sassen, 2013; Acuto, 2011; Curtis, 2016; Vogel et al., 2020), to be sure the narrative has been used as a goal of public policy (Vogel et al., 2020).

- Sustainable city complex and the Global thinking and city diplomacy

Second, this 'global thinking has stimulated the rise of city diplomacy' (Acuto 2013; Acuto et al, 2017; Kosovac et al., 2021) in various ways. For starters, it has brought together many cities seeking to expand their international networks and collaborations (Acuto & Pejic, 2021; Kosovac et al., 2021). What has consequently emerged are mounting numbers of partnerships and networks that connect local challenges to the global scale, thus creating cross border platform for knowledge sharing among local governments (Kosovac et al., 2021). In this way, cities have increased their presence as joint group actors in international politics (Acuto, 2013), through this 'global city thinking' (Acuto & Pejic, 2021). This form of city diplomacy characterized by activities such as "interlocal policy networks" (Peck, 2005, p. 767), have been instrumental in the spread and circulation of global city governance knowledge. Various arguments in the literature have highlighted the implications of these powerful networks on

²⁶ Place branding is concerned with building a spatial imaginary that creates a competitive urge, resulting more tourists, more inhabitants, more firms and more investments (Boisen et al., 2011).

local governance politics (Kosovac et al., 2021), which are “*described as formalized organizations involving cities as their main membership and characterized by reciprocal and established patterns of communication*” (Acuto et al, 2017: 15). In the context on this study, I raise questions about the implication of those politics in shaping local environmental governance objectives.

- Cities of the south in urban diplomacy

City diplomacy is seemingly at the heart of these long-established networks. Although late starters, more and more cities of the South are now also enrolling in city diplomacy. While this city sustainability in branding experiences have crystalized in Western cities, some of the cities in the global South, including some in the BRICS²⁷ block, such as Delhi, Tshwane and some Chinese cities are starting to follow this international trend, using sustainability as a brand position (Boisen et al., 2011; Taecharungroj et al., 2019). This development has led to some cities promoting themselves as forerunners not only in sustainable urban development, but also on the Global cities paradigm, which is arguably incited by multi sources that seek to create global order (Curtis, 2016). In her PhD thesis, Laura Wenz (2014), draws on the case of Cape Town, South Africa, to illustrate how the city framed its position in global urban governance, relying on the World Design Capital, a form of creative cities paradigm, as its tool of city diplomacy. This pursuit of urban diplomacy by Southern cities, including Tshwane, can also be traced in global environmental governance. For instance, various South African cities are well represented in the membership of various global environmental governance networks (World Bank, 2013), including the C40 Cities, ECLEI and UCLG [see Chapter Five]. These networks have also been instrumental in the spread of ‘environmental diplomacy’ (Chasek, 2001; Death, 2008); Death, 2011). As I will further illustrate in Chapter Five, the City of Tshwane, under the leadership of its erstwhile mayor Kgosietsi Ramokgopa, put itself in the forefront as a leader in continental environmental governance and politics. Tshwane was at the forefront of the creation of the ACCSF, a Forum of African Cities on Sustainability [see figure 2. 2, also see Chapter Five]. In the end, cities of the South found grounding in the sustainable city label as a tool for practicing city diplomacy.

²⁷ BRICS is an acronym representing a group of coined to associate five major emerging economies: Brazil, Russia, India, China, and South Africa.



Figure 2.3: Tshwane in Global Networks
Source: C40 website (Accessed, October 2021)

- City diplomacy and implications on environmental governance

As we have seen, city diplomacy sets in motion environmental governance networks. The implications of city diplomacy on environmental governance have been raised as concerns by Acuto (2013), cautioning us of the localized influence of strategic urban planning and the globalized agency of city diplomacy both in relation to environmental governance. Conference diplomacy plays a key role in this regard. For instance, Global summits and major conferences are key Drivers of the environmental diplomacy (Li et al., 2020; Zeyuan, 2019). Environmental summits play a significant role of in the conduct of global politics and diplomacy as they influence and shape discourses of sustainable development and climate change (Death, 2011). Although this conference diplomacy can be traced back to the 1815 Congress of Vienna²⁸ (Chasek, 2001), the spread of environmental diplomacy can be largely attributed to the Brundtland Commission of 1987. Following that, environmental diplomacy was further advanced by the 1992 United Nations Conference on Sustainable Development in Rio de Janeiro. The Rio sustainability conference brought cities into the mainstream under the objective of the Agenda 21. One major objective of the Agenda 21 is to drive the institutionalization of the local Agenda 21 in every local government, with the end goal of achieving global sustainable development by 2000.

²⁸ The most significant innovation of the Congress of Vienna consisted precisely in enlarging participation to admit the representatives of small territories or cities who were not given a hearing in the earlier conclaves of monarchs that dominated the eighteenth century (Chasek, 2001).

The ascent of Southern cities (African cities in particular) in global environmental politics was largely propelled by the World Summit on Sustainable Development²⁹ (WSSD), which convened in 2002 in Johannesburg, South Africa. The summit succeeded in placing sustainable development back on the political agenda, placing particular focus on the environment and development needs in Africa such as household energy, water and sanitation (von Schirnding, 2005). Further advancing the profile of African cities in global environmental governance, was the hosting of COP17 in Durban South Africa in 2011, where discussions were held with South African cities and a 'City Accord on City Data' was proposed by the cities of South Africa (World Bank, 2013). While I am in accord with Death's (2011) assertions that multilateral summitry plays a key role as a technique of global governance, and a spaces for advertising and branding through which the conduct of conduct is conveyed (Death, 2011). I however, further argue that environmental diplomacy also functions as a site to expand the global environmental consensus of sustainability.

While pursuing the idea of sustainable cities as a marketing tool may have its own merit, for me it also illuminates two concerns. First, most efforts appear to have been focused on the environmental aspect of sustainability, while the adoption of other dimensions of sustainability, including social and economic, has been limited (Taecharungroj et al., 2019), as I will show in chapter. Thus, it could be argued that environmental diplomacy reinforces the consensus emerging from the Anthropocene nature of the sustainable city. This raises questions about whether that form of sustainable development is possible with city diplomacy in governance processes. Second, I argue that competitive global status pursued through urban diplomacy orientates the sustainable city towards an outward looking approach to sustainability. I argue that, the spatial approaches resulting from urban diplomacy bring out the contradictions in environmental governance. From this development we can understand how the discourses on spatial arrangement within the sustainable city paradigm recuperate informality as its object of their Anthropocene consensus, as I will illustrate through idea of the Slum-Free Cities. What is evident is that reconstructing how the notion of the sustainable city positioned cities as part of the global collective, for instance by promoting urban diplomacy as a 'new governance activities of cities' (Curtis, 2016: 455), enables us to consider how informality is problematized in the global city status of a sustainable city.

²⁹ *The World Summit on Sustainable Development convened from 26 August 2002 to 4 September 2002, in Johannesburg, South Africa. The aim of the summit was to reaffirm the international's community commitment towards the implementation of international agreements including Agenda 21, and the achievement of the Millennium Development Goals.*

2.3 Urban Informality and the 'Right' to a Sustainable City

While sustainability has become discursively relevant when speaking of informality and its unjust development, informal space is generally posited as environmental degradation, as a result, drawing the stigma of being an antithesis of sustainability. In that vein, this section opens the debate with reflections on current conventional narratives on urban informality. This is not a new debate, but the insights emerging from those previously observed has provided a direction for the formal/informal dichotomies narratives that dominate our negative conceptions on informality. They have also fed into the Anthropocene moment of sustainability. To avoid confusion of terminology, the following subsection provides clarification of my working definition of informality. In keeping with this definition, I then interrogate how informality fits into the understanding of the urban that fits the imaginary spatial development logic of sustainability. In trying to understand this, I pose a question that asks *"what is the urban?"* (Almeida, 2018, p. 2), not necessarily for its definition, rather to interrogate what can be counted as a city. This will imply challenging the status quo where the *"urban question is treated as something already satisfactory"* (Lawhon, 2020:38). To do so, I also call on subaltern urbanism because it not only reintroduces urban informality into the city, but it also offers some rebuttal to challenge the Anthropocene and its apolitical framing of the urban, thus pulling the subaltern into environmental urban governance debates. I conclude with some reflections on global consensus on modes of governance interventions subaltern spaces are expected to conform to, to question the environmental politics of a sustainable city without slums. Here, I argue that policy interventions directed at informality have the effect of depoliticizing what the implications of the othering of urban informality might be on the idea of sustainable cities in the global South.

2.3.1 Discourses on Informality

Informality has become a fundamental site for mediating the everyday struggles of power, tenure and resources. Reinforcing the significance of informality in the mediation of urban struggle are similar arguments from Holston (2008, p. 4) that “the routine of the urban poor to urban citizenship, as their routine in the city is marked by the hardships of illegal residence, housing struggles, and land conflicts, which become the context and substance of urban citizenship”. Meaning that informality has specific merits of informal livelihoods, considering that a large section of the economy substantially relies on the informal means to access opportunities and survive in the city (Adama, 2014). For instance, Roy (2005) urges us to understand informality as “*a series of transactions that connect different economies and spaces to one another*”(p. 148) That being said, informality continues to be conceptualized as a negative phenomenon in mainstream literature.

This ‘othering’ of informality has been entrenched by debates that crystallized the informal economy into four dominant schools of thought (Chen & Alter, 2012);

- The dualistic perspective views the informal sector of the economy as comprising of marginal activities (Chen & Alter, 2012). In this perspective, the exclusion of the informal operators from modern economic opportunities is reduced to imbalances between the growth rates of the population.
- The structuralist perspective on the other hand sees the informal economy as subordinated economic units (micro-enterprises), where workers serve to reduce input and labour costs. The Structuralists argue that the nature of capitalist growth drives informality (Chen & Alter, 2012).
- The Legalist school blames informality as intentionally breaking the formal regulation. Here the informal sector is comprised of “plucky” micro-entrepreneurs who choose to operate informally in order to avoid the costs, time and effort of formal registration and who need property rights to convert their assets into legally recognized assets (de Soto 1989; 2000). In general, the legalistic perspective regards the informal economy as working against formal structure. While the formal economy as that economic zone that is legally sanctioned, the informal economy is structured by extensively informalized systems of service provision and livelihoods, where popular groups have devised their own sets of rules for regulating relations irrespective of state policy or approval (Lindell, 2008).
- Lastly, is the Voluntarist school, which expands the legalist argument. The Voluntarists argue that informal operators choose to function informally—after weighing the costs-benefits of informality relative to formality. It also focuses on informal entrepreneurs who deliberately seek to avoid regulations and taxation but, unlike the legalist school, does not blame the cumbersome registration procedures (Chen & Alter, 2012).

Although these four approaches seem to have different perspectives on the nature of the informal economy and its causal theory. Collectively they, nonetheless, implicitly demonstrate the negative perceptions that underpin the conception of urban informality, both in theory and in practice. In consequence, this has widened a cavity in efforts to bridge the continuing gap between the formal and

informal economy. The dominant misrecognitions and misperceptions registered in most of the literature to misframing informality as the other follows from these binary terms which, to borrow from Banks et al. (2020), persistently presuppose formality as the norm, and informality as an aberration, a notion that has persisted despite vigorous contestation.

- **What is informality?**

The term informality has been used as an umbrella phrase to describe a myriad of activities viewed as outside the normative conception of formal, including the informal economy, informal spaces and informal practices. In this study I use the notion of informality in relation to informal spaces. Dominant literature widely recognizes informal human settlements – generally characterized by tenure and housing deprivations. Huchzermeyer & Karam (2006), for example, link marginalization and exclusion from formal tenure to informality – as one of the modes of urban informality. In South Africa, informal human settlements are also differentiated by the nature of the construction. There is informality created in backyard dwellings and informality in informal settlements. The difference is that shacks in the backyard are in most instances built on legally serviced sites with tenure, whereas those informal settlements are built on unauthorized sites (You, 2007; Huchzermeyer, 2008).

Nonetheless, informal settlements are spaces of marginalization and deprivation in terms of their social, environmental, economic and political construct. Variant explanations of those deprivations have been raised in literature. Some, including Pieterse (2019) have suggested that other conditions defining informal settlements may include deprivations such as limited or no access to housing and essential services and poor environmental conditions. A commonly observed urbanization trend in the global South, including in Tshwane, is embodied by the struggles of many urbanites in accessing formal housing and land tenure. Hence, others including Shatkin (2004) have argued for informal spaces to be understood as forgotten places within an urban network. Roy's (2005) argument that it is the right to the city³⁰ that is at stake in urban informality, moves us to seek an understanding of urbanization that reflects the struggles of the urban poor of the right to the city. This indicates a need for a theoretical expansion of interpretations of urbanization trends in southern cities.

- **More than just tenure Struggles for tenure Tenure deprivation**

While tenure deprivation is useful to reflect the challenges of informality: as highlighted in Huchzermeyer (2010) definition of informal settlements as “*unplanned and unauthorized residential areas accommodating people who cannot afford to access housing in the formal market*” (129). This understanding highlights the fact that informal settlements are a manifestation of an unstructured response to bridge this tenure marginalization and exclusion from state processes. Moreover, such perspectives bring us back to the debates that argue that access and survival in the city, by the urban poor, has been facilitated by the informal spaces. This consequently forces us to acknowledge that informal spaces have become an integral part of the urban landscape (Andavarapu & Edelman, 2013). In this context, urban informality should, therefore, be understood as spaces of vulnerability produced by those with tenure deprivation.

³⁰ *The right to the city is Lefebvrian concept thatIn this lens, the struggles for the to the city of informal spaces should be understood beyond the conventional arguments of “lack of access to basic infrastructure” (Pieterse, 2008).*

These deprivations of informal settlements have been attributed to factors such as exclusion and marginalization of informal dwellers from decision-making processes and procedures (Huchzermeyer, 2009; Routledge, 2010). This raises questions on procedural justice in discourses on informality, based on the misrecognition of identities. I argue, therefore, that informal settlements should also be understood as spaces of misrecognition. The struggle for justice facing informality can also be seen through Ravi Sundaram's (2012) understanding of the *"slum, both as colonial legacy as well as an addressee of the demands for urban justice"* (p:1). What these arguments illustrate is that attempts to define urban informality should shift from the stagnant articulations of urban informality. I concur with Banks et al. (2020) that what is needed is a broader conceptual understanding of urban informality that captures its complexity. In this way, we can be moved from the conception of informality that is depoliticized, meaning defined from the perspective of material deprivation.

2.3.2 What counts as the urban in the conventional spatial logic

The question of what counts as the urban has, rightly so, drawn the critical attention of southern scholars. They argue that for a long time, the 'urban question' (Brenner, 2000) has been framed through the northern gaze and remained largely rooted in northern theories. Lawhon (2020), for instance, draws our attention to the rural-urban dichotomy to critique the deployment of northern definitions of the urban in literature, rather than opening up the urban question to African empirics. Taking cognisance of this approach point us to reflect on what counts as the urban. While I take cognisance of this line of argument, my own argument takes a different focus, as it seeks to reflect on the formal-informal dichotomy generally underpinning the conception of the urban spatial logic.

The urbanization of nature is about the organization of the social life. This means that the urban can be productively understood as a transformative potential that is constantly generated through processes of urbanization (Brenner & Schmid, 2015). This understanding is captured in Harvey's (1996) conceptualisation of the city as a production of specific and quite heterogeneous spatial forms constituted by different kinds of social action. This understanding not only clarifies that we should understand the city "*as a product of growth rather than of instantaneous creation*" (Wirth, 1938:3). I argue that it also reinforces the understating that spatially, cities come in different forms and shapes, based on the organizational processes that shape them. The literature highlights that as cities develop into complex urban settings (Routledge, 2010), they become relatively large, dense and permanent settlement (Wirth, 1938). In that complexity and density there exist a diverse spatial composition, arguably reflective of the wider systems of social and political relationships at many different scales within which cities are embedded (Scott & Storper, 2014).

Routledge (2009) urges us to recall that urban places are an interactive complex of social relations connecting us up increasingly to 'distant others' in complex ways. Thus, the essence of the urban networks lies within its heterogeneity. As noted by Scott & Storper (2014) the diversity of the urban is reflected in the features that give rise to numerous variations in their form and function across time and space. This means that the urban serves a diversity of socio-spatial needs. Moreover, the diversity of the urban is reflected through the disproportional social, economic, spatial and environmental development patterns in the network (You, 2007). Thus, recognizing this divergent organization of the urban makes us aware that a city is a complex structural setting (Huchzermeyer, 2002; Routledge, 2010). This view resonates with Freund's (2007:2, cited in Lawhon 2020) argument that: *If sites fail to meet certain contemporary criteria of what city should be like, such settlements should not be dismissed but rather embraced with interest for their unique configurations and contribution to the cultural development*" (p:2). Meaning that, we should reconsider the preconceived ideas with which we conceptualise the organization of the urban. This will entail opening the space to allow different ways of thinking about space to enter urban debates.

- **Genesis of the formal/informal dichotomy**

Having said that, the informal/formal binaries in the conception of the urban have been a focus of urban studies. In consequence, informal spaces enter the urban logic debates from a position of spatial inferiority as the 'other'. This othering attracts negative spatial value (AlSayyad & Roy, 2004) of informal spaces in the urban spatial logic, which is generally framed through the hegemonic lens of modernism, colonialism and neoliberalism. In consequence, there is an incapability to see informality as a valuable element in the modern spatial logic. These simplistic negative perceptions on informality need be critiqued, as they fail to recognize that the informal economy is particularly central to the everyday experiences of many urbanites. Perceptions can be understood as *"expectations about behaviour that relates to a position in social structure to actions in place"* (Cresswell, 1996, p. 3). The contradicting conventional perceptions on informality have been gradually evolving phenomenon, from when the concept of urban informality was first observed (Banks et al., 2020).

The colonial period was a significant moment in the framing of informality in the urban logic, meaning that current negative critique of urban informality can be traced from the colonial epistemology. During that time the 'logic of environmental causality'³¹ (Huxley, 2006), became a key spatial rationality from which informality was conceptualized.

-The framing of informality in criminal terms has been observed since its existence in the Victorian era (Andavarapu & Edelman, 2013), when informal settlements were portrayed in conventional urban discourses as a social problem. As a result, informality is more than 'often criminalised and de-legitimised' (Myers, 2011; Banks et al., 2020) in conventional discourses. For example, Huchzermeyer's (2009) definition of informal settlements as *"illegal land invasion by the urban poor not directed by proper land use or building regulations"* (page), remind us of how the legalist and voluntarist perspectives to the continue to challenge the existence of tenure informality [see above]. As I will also illustrate in Chapter Four, in contemporary cities, including Tshwane, the criminalization of informal spaces is contested from their emergence as a product of 'illegal' land occupation by the urban poor.

In the view of Banks et al. (2020), for example, the persistent reading of informality as the opposite of the formal reflects attitudes prevalent during the colonial and postcolonial periods, and perceptions that development would replicate processes then observed in the global North (Banks et al., 2020). Meaning that the formal/informal dichotomy together with the colonial drove the conception of space anything outside of formality represents such abnormality (Cresswell, 1996). For instance, modern theories such as the culture of poverty and marginality have relentlessly pursued the portrayal of slums as problematic dens of violence and prostitution (Andavarapu & Edelman, 2013).

The genesis of the informality-formality dichotomy can also be traced through urban planning governance and processes. More than often informality is often associated with procedures and

³¹ Huxley (2006) illustrates how Multitudinous nineteenth-century practices of sanitary reform, slum removal, building control, moral surveillance, domestic advice, medical prescription, invoked and materially embodied logics of spatial and environmental causality. In South Africa, the apartheid regime applied this spatial logic to create segregated spaces.

phenomena that take place outside formal processes or planned and regulated zones (Roy 2005; Avni & Yiftachel, 2014). Further, other explanations also situate informality as a state of exception from the formal order of urbanization (Roy, 2005).

Critical literature on the conception of space finds the informal vis-à-vis formal dichotomy – which I argue, is the child of the ‘modernist’ way of thinking about space – is problematic in at least two ways. Firstly, it undermines the significance of informality on the urban spatial network. Framing informality as an exception to the norm attaches understandings to informality that undermine its significance of in urban development discourses. For instance, in this false dichotomy (Roy, 2005), informal settlements are often viewed as a superfluous element in the urban fabric. A position dispelled by You’s (2007) argument that informal settlements are a critical source of shelter for the poor and the low-income earners. This also resonates with the view that the informality has become a significant element in urban growth and in the production of the city (Lutzoni, 2016).

Critics of the dominant conceptualization of informality, including Roy (2005), have argued against the standard dichotomy of two sectors, formal and informal, given that it posits informality as a separate sector. As such, definitions of the urban should take the importance of informality into account, Lutzoni (2016), for example, also asserts that informality is an integral part of a single system. Raising further questions on the nature of the relationship between the informal and formal, Myers (2011) asks whether *“the formal and the informal should be working together or clash in production of space”*(p:8). Various discourses in urban studies seem to suggest that both informality and formality have a place as key players in the urban development. Echoing these sentiments is Mbembe & Nuttal (2007), in their view the duality clash between informality and formality is uncalled for, as the two are, not outside each other. In the end, informality should rather be embraced as incorporated into the formal (Avni & Yiftachel, 2014).

Secondly, the formal/informal dichotomy enrols informality as a vehicle for neoliberal policy interventions. Marxist arguments have, for example, taken up a neoliberal approach to critique this dichotomy. Here, critics such as Cresswell (1996), for instance, have brought forth the power of the dominant class in the formulation of the ideas that construct space. Speaking from this hegemonic view of the urban, they regard deviation as synonymous with ‘abnormal’ (Cresswell, 1996). Intervention into informality flows from the perceptions of dominant groups, who according to Cresswell are ready and armed to restore order of physical manifestations that do not conform to their standards.

Despite the growing critical voices in literature, efforts to deconstruct the negative position of informal spaces have been rather slow, primarily because the negative narratives continue to influence the mainstream misrepresentations of informality. Thus, resonating with Schindler’s (2014) critique of urban studies and its persisting bias that locates ‘the city’ in the global North. Taking back the southern urban from the North, according to Brenner and Schmid (2015) will require that postcolonial urbanism transcends the criticism that it has struggled to articulate precisely how Southern cities differ from

their Northern counterparts. I, however, argue that we might end up with a very different definition of the urban if we heed the call to recognize the organizing logic of informality in the urban. In the view of Roy & AlSayyad (2004), a re-conceptualization urban informality may serve to demonstrate an organizing logic, which they contend is a system of norms that governs the process of urban transformation. This argument also re-invigorates the muted truths about informality as a product of urbanization.

In recent Global urban governance initiatives such as the New Urban Agenda (NUA) [see box 2. 2] have started to recognize informality dominated urbanization as an important aspect of societal change. In these discussions, informality—once associated with poor squatter settlements— is now slowly seen as a generalized mode of urbanization (Roy, 2005), particularly in post-colonial societies. These developments seem to suggest that the conception of informality centred urbanization has been recognized in global environmental governance discourses.

The New Urban Agenda (NUA), a policy programme of the United Nations for Habitat adopted by various countries in 2016, in Quito, Ecuador. South Africa, through the national Department of Housing, is also signatory to this international consensus for environmental management.

NUA is a new global framework for managing urbanization. Thus, its consensus is centred around inclusive urbanization . In this unprecedented era of increasing urbanization, and in the context of the 2030 Agenda for Sustainable Development, the Paris Agreement, and other global development agreements and frameworks, we have reached a critical point in understanding that cities can be the source of solutions to, rather than the cause of, the challenges that our world is facing today. If well-planned and well-managed, urbanization can be a powerful tool for sustainable development for both developing and developed countries (UN-Habitat, 2016).

Furthermore, NUA positions a policy objective of inclusive urban development, seeking to do right with the “victims of urbanization” (Roy, 2005), considering, that as highlighted by (Turok and Scheba, 2018) The ‘right to the city’ was one of the main sticking points in negotiating the New Urban Agenda.

The sustainability objective is also at the core of the New Urban Agenda, as it represents a shared vision for a better and more sustainable future – one in which all people have equal rights and access to the benefits and opportunities that cities can offer, and in which the international community reconsiders the urban systems and physical form of our urban spaces to achieve this (UN-Habitat, 2016).

Box 2.2: The New Urban Agenda

That being said, informality remains marginalized in the organizing logic of the sustainable city. In the neoliberal and hegemonic social ordering (Swyngedouw, 2009) of sustainable city, urban informality continues to be associated with negative articulations of environmental degradation.

Evans et al. in *Governing Sustainable Cities* (2005) remind us that the rise of the sustainable city was instigated by the fact that the world's population is increasingly becoming an urban one. Meaning that, in many cities around the world more and more people are living in urban areas. Dealing with this unprecedented rapid urbanization has then probably risen as one of the most important defeats for sustainable development (Hens, 2010). Furthermore, there is also consensus about the role of urbanized world in bringing social, economic, and environmental sustainability into challenged (Zeng et al., 2016), in ways that implicate the capacity of the city processes.

For cities of the South urbanization unfolds under complex conditions, characterized by a myriad of deprivations. As Schindler (2017) eloquently argued, the metabolic configuration of Southern cities differs tremendously from that of Northern cities in numerous ways. For instance, residents of Southern cities access public utilities, infrastructure and service systems predominately through informal means. While Northern cities where there is nearly universal access to metabolic flows such as water and electricity. Hence, urban theory, through its Northern framed gaze, posit this informality-centred 'urbanization in developing countries as distinct' (Sheppard et al., 2013). This distinctiveness is framed around the concerns of informality as a posing a threat it to the environment, natural resources, health conditions, social cohesion, and urban functionality (Cobbinah et al., 2015). Meaning that urban informality receives particular attention as a source of unsustainable urban development "as a hindrance to sustainable development and are commonly accused of destroying the environment" (Ramutsindela, 2002: 55). To be sure, informal spaces are posited as one of the problems facing developing countries, that are increasingly threatening the realisation of sustainable development goals (Cobbinah et al., 2013; Domfeh and Bawole, 2009; Motsoene, 2014 in cobbinah). Others, including (Misilu et al., 2010; Rosado, 2008 cited in cobbinah et al.), even go further to frame informality dominated urbanization as 'unsustainable urbanization'. While there seems to be some recognition, in literature, that achieving sustainable development is not a linear process, but rather a complex process (Marcusse, 1998), there is also continued insistence, in dominant urban narratives, assigning a particular burden of sustainability to informal spaces and their inhabitants. This means that the 'struggles for right to the city of informal informality' (Roy, 2005), is now also articulated in sustainability terms.

2.3.3 Theorizing subaltern urbanism

To speak of informality as spaces of poor environmental condition and a crisis to the organizing logic in the sustainability city logic, requires that I turn to 'subaltern urbanism'³² (Roy, 2011; Pithouse, 2014; Schindler, 2014). While conventional narratives pursued the classification of urban informality as foreign intrusion, subaltern urbanism, on the other hand, writes against the apocalyptic narratives of the slum (Roy, 2011). Ananya Roy introduces the concept 'subaltern urbanism' in her 2011 article 'Slumdog Cities: Rethinking Subaltern Urbanism'. Here, Roy theorizes the ideas of the subaltern spaces and the subaltern class to draw informality back to the debates to challenge urban ordering concepts and epistemologies distilled from western processes of urbanisation. Similar understandings are extended by Schindler (2014), understandings which point to the intention of subaltern urbanism's efforts to reclaim the conception of the Southern urban. To do this, subaltern urbanism challenges the 'othering' of subaltern spaces and subaltern classes³³. First, by seeking to confer recognition on spaces of poverty and forms of popular agency that often remain invisible and neglected in the mainstream debates (Roy, 2011). This means that subaltern urbanism presents a new way to understand slums and their inhabitants beyond the limits of our epistemologies and methodologies (Schindler, 2014). In an attempt to better position informality, subaltern urbanism scholars focus on closing off the dichotomy that defines subaltern and conventional spaces and haunts the framing of the urban network. In the view of Schindler, 2014, for instance, to *"deconstruct the North-South divide and engage in meaningful comparisons of very unique urban spaces will bring a wide range of heterogeneous urban forms into view"* (page).

Second, closing off the informal-formal dichotomy encourages understanding of informality 'as a way of inhabiting the territory' (AlSayyad, 2004). For example, Roy (2011), positions slums as territories of habitation, livelihoods, self-organization and politics. In this way, subaltern urbanism illuminates other modes of securing tenure outside the formally 'acceptable' state processes. In the Planet of Slums, Davis (2004, p. 24) argues that in the slums in cities of South *"informal survival is a norm to meet basic needs"*. As it has already been established, Lefebvre's element of lived spaces- presented in table 2.1- captures this way of viewing the spatial logic, in ways that illuminates alternative lived experiences within the hegemonic spatial ordering. Taking cue from these theorizers of space, I argue that approaching informality outside such understanding evokes and perpetuates the misperceptions that frame informal spaces as deviant and an environmental urban crisis. I argue that as a result of the importance it attributes to informality, subaltern urbanism provides a useful analytical tool to enable more proper recognition of the informality in the urban. The arguments posed to explicate the rise of subaltern spaces and classes are also useful to deconstruct the misframing (Bozalek & Boughey, 2012) of the informal dweller identity, and consequently to challenge their positioning in the apolitical Anthropocene spatial logics.

³² Subaltern is a Gramscian concept, from where he considers that one is subaltern when one is in a position of subordination to hegemonic power. The framing of the subaltern politics of emerged from this understanding.

³³ Subaltern spaces and subaltern classes are umbrella terms to speak about urban informality [see Roy, 2011].

While neoliberal explanations reduce the formation of informality as a by-product of capitalism, subaltern scholars have challenged these narrow Marxist understandings by pulling the role of the state into the politics of informality. To illustrate the implications of the state in subaltern formations through failing and unjust governance processes, Roy also draws on Chatterjee's (2004) interpretation that urban informality, which he argues makes possible to understand the place of governance governmental administration in the production of the slum. First, positioning slums as vibrant living spaces full of political expression and self-organization (Roy, 2005), suggests that failing state processes created low-hanging fruits for self-organization. This explanation is also useful to explain the position of heroism in informality, which is being persuaded by subaltern urbanism discourses. A key proponent of the heroism perspective to informality (de Soto, 1989) urges us to understand informality as a show of active citizenry in modern society, given the *"creative response to the state's incapacity to satisfy the basic needs of the impoverished masses"* (p: 14). De Soto's argument also raises questions about the role of the state in the reinforcement of the informal dweller and their political agency. Further illustrating the concerns of other postcolonial writers, including Bayat (2007), who argue that, a slum dweller is a 'subject of politics' formed through political agency. Chatterjee's (2004) concept of the political society³⁴ has made great contributions to postcolonial scholarship. For my study, in particular, Chatterjee's articulations of the political society as distinct from the 'civil society' offers an opportunity to analyse how the state treats subaltern informality as an environmental intrusion.

Second, in the view of Roy (2011) using this approach in a heuristic method illuminates the state's practices and its implications in the production of "uneven urban geography of spatial value". In this example, Roy and other critical scholars question the unequal treatment of subaltern and bourgeois informality in the state machinery. In their view, state processes can equally produce the bourgeois city and its edifices of prosperity as they do the informal settlements. Here, our attention is drawn to how certain planning processes can designate certain land uses and settlement patterns as problematic. Writers in the subaltern urbanism urge us to question how the power relations in contemporary urban spatial arrangement around the world are shaped by multiple informalities, including elite informality and subaltern informality, yet elite informality – which they argue may include farmhouses to commercial developments – is no more legal than the shantytowns of the poor (Roy, 2001). That being said, the expressions of class power and legitimacy assigned to elite informality (Roy, 2011; Banks et al., 2020) buys them acceptance as not really being informal. Talking back against this development Banks et al. (2020) argue that 'informality is not confined to the urban poor'.

Lastly, poking holes at these state practices that inform frames of informality not only lifts the veil on *'the broader range of actors and processes involved in the creation and maintenance of urban informality'* (Banks et al., 2020: 231), however, I also argue, illustrates how the subaltern is framed in environmental governance politics. For instance, dominant urban planning discourses have for long depicted the slum dwellers as degenerate' (Weinstein, 2009) and the slums designated as 'nuisance'. As my analysis of informality in the City of Tshwane indicates, the politics of accessing land and adequate housing, as

³⁴ For Chatterjee (2004) a political society is a castor of the community that resorts to violation of the law to secure habitation and livelihood.

also argued by Dhananka (2016), result in specific forms of habitation and contribute to the emergence of particular notions of urban citizenship. This has contributed to [mis]framing of their identity as 'secondary category of citizens' (Roy, 2011). The case of 'unlawful' land occupation by *Baipehi* [a local slang meaning unlawful land occupiers] generally draws views that the informal dweller purposely seeks habitability in unsuitable conditions. This *misframing* of subaltern identity has not been helpful, especially in South Africa, where production of spaces has been racialized (Pithouse, 2014). Instead, they have further perpetuated the racial classification of spaces held by the dominant class in society. I draw from Perlman's (1976) observations of power and subject formation, which argues that the *"myth of moral degradation of shack dwellers was produced by the constant attempt of those in power to blame of the poor for their position because of deviant attitudes, masking the unwillingness of the powerful to share their privilege"* (p:102). As I will show in Chapter Six a 2017 case of racial violence³⁵ in the City of Tshwane, in which the white residents of Brenner attacked informal dwellers relocated from the sinkhole incident in Jeffsville demonstrates the lengths of those attitudes. This scenario unravels racial profiling as a contributor to environmental injustice [see discussion in section 2.4]

Although Roy's subaltern urbanism allows the examination of the slum habitation beyond the limits of narrow, dogmatic and elitist neoliberal urbanism, it can also enable the recognition of the environmental politics of production beyond the narrow sustainable city paradigm. In this way, subaltern urbanism can help to unsettle the Anthropocene conventional conception which presents informality as a crisis (Roy, 2011) and as a danger to the environment. However, this will require interrogating the micropolitics of the 'hegemonic environmental imaginaries' (Gabriel, 2014) in the same vigour as it will also require *"that postcolonial theory must itself be much more attentive to how postcolonial government problematizes and governs subaltern subjects and spaces"* (Roy, 2014:138). This especially means interrogating the politics of governance processes directed at reproducing subaltern spaces, to which I turn to in the next subsection

³⁵ <https://www.iol.co.za/news/theyre-coming-to-burn-our-homes-and-rape-our-women-7565822>

2.3.4 An envisaged sustainable city without slums

As mentioned, subaltern urbanism is an important turn in the remaking on a postcolonial city, as it reintroduces urban informality into the debates through a modernist spatial ordering and governance practices. Seeking to make sense of the governance rationale of sustainable city and informality, I draw a parallel with the way informality is brought into perspective in postcolonial government through the 'Slum-free Cities policy'³⁶ (Roy, 2014), which emphasises the governance of subaltern spaces and subjects in postcolonial government in Indian cities. As Roy illustrates Slum-free Cities (SFC) reveals the spatio-temporal imaginations of postcolonial government, furthermore, it also *"embodies the stubborn contradictions of postcolonial government and its efforts to spatially implement inclusive growth"* (Roy, 2014: 142). Thus, SFC can help to understand truths about the rationalities of environmental governance efforts in post-apartheid South African cities, including Tshwane, through processes of formalization [which shift from the apartheid approach of demolishing informal settlements to curb Black urbanization].

- Social and space ordering with Cities without slums

The SFC rational works through sustaining the consensus of an urban life without slums. For example, Roy draws from Gidwani & Reddy (2011: 1652–53) to argue that SFC is a post-development³⁷ moment. Here, I also draw parallel between this idea and Swyngedouw's (2009) postdemocratic concept, which *"has replaced debate, disagreement and dissensus with a series of technologies of governing that fuse around consensus, agreement, accountancy metrics and technocratic environmental management"* (p:601). This consensus can be traced through the changing rhetoric framing the adoption of SFC, which was a turning point from the harsh intervention approaches directed at informality. As highlighted by Roy, Slum-free Cities marks a shift in city-making projects from slum evictions and demolitions to the integration of the poor into market rule. Diçek (2007) urges us to bear in mind that urban policy does not operate with an unchanging view of space. In other words, different policy discourses and programmes imagine spaces in varying ways (page). In the view of Diçek it is in those discursive terms with which to talk about its spaces change, where our conceptualization of spaces changes as well.

It has also been established in literature that those conceptions of space informs, the constitution of problems and formulation of solutions (Diçek, 2007). Similar parallels can be draw from SFC. As argued by Roy that, Slum-free Cities, as a 'programme of government' is a 'problematizing activity' (Rose &

³⁶ The 'Slum-free Cities' policy draws from the internationally conceived and promoted idea of 'cities without slums', a form of slum upgrading programme initiated by Cities Alliance³⁶ (Andavarapu & Edelman, 2013). The central idea of 'cities without slums' is on promoting a national growth agenda centred on sustainable, inclusive cities (Andavarapu & Edelman, 2013). Like the 'cities without slums', Slum-free Cities endeavour is that it gives centrality to the slum in the making of urban futures (Roy, 2014). Particularly because, as highlighted by Roy, Slum-free Cities marks a shift in city-making projects, it also marks a break with previous frames of world-class city making, which relied on the crude techniques of slum evictions and demolitions. Here, informality is perceived as a transgression to formality commanding corrective and appropriate interventions (Cresswell, 1996). These crude techniques were influenced by varying discourses. For instance, Huchzermeyer (2010) associates these violent evictions and rhetoric with political intervention.

³⁷ Roy cites a provocative essay by Gidwani and Reddy (2011: 1652–53) who argue that 'India's urban present is a post-development formation', one in which the urban poor is 'superfluous to a regime of capitalist value and where 'neither the apparatuses of the state, nor the urban bourgeoisie seek this social engagement' with 'surplus humanity'.

Miller, 2010, p. 279), one in which the slum crystallizes, in both unique and generalizable ways, the problems and hopes of the New Asian Age. Before that, the concerns of most governments about the visible presence of such settlements in their cities, is instigated through policies that often tend to focus on eradicating the symptoms (Huchzermeyer & Karam (2006). Similarly, in urban planning circles of the time, slums were not considered part of the urban spatial logic, instead subaltern informality associated with informal settlements is often portrayed as a social problem, to be intervened against through demolition (Andavarapu & Edelman, 2013). In South Africa interventions aimed at eradicating informality have been mainly driven by two opposing views (Huchzermeyer, 2002). First, the Marxist argument making claims that, class exploitation is at the root of the poor quality of life facing the majority poor, driven by exclusionary development (Huchzermeyer, 2002). The other view, driven from the 'apocalyptic' perception on informality, holds that informal settlements have threatening implications on the existing middle class order (Huchzermeyer, 2002; You,2007).

While the Slum-free Cities (SFC) has changed its perception of informal space in urban logic, it nonetheless remains stuck in modernist views. In her work on 'slum free cities' in Asian cities settings Roy (2014) theorizes SFC as a recitation of modernization. Critics of modernization argue that modernity continues to haunt Southern cities through the frames of formalization of economic and residency status, while informality is relegated to 'backwardness' of secondary social status (Banks et al., 2020). Slum free cities, on the other hand, seems to have an integration agenda. Roy (2014), for instance, presents slum free cities as projects of inclusivity seeking to integrate the poor into market rule. This objective draws from Hernando de Soto's framework of the 'mystery of capital' (Roy, 2014). In the view of de Soto (2000)poverty results from the lack of 'the process to represent property and create capital (2000:7). For de Soto the idea is to release the subaltern from the shackles of poverty. Following on de Soto's idea, slum free cities seek to address the politics of visibility and recognition, by unlocking property value trapped informal tenure (Roy, 2014). In this regard, de Soto (de Soto, 1993) has been very vocal about the formalization of land tenure. De Soto views the introduction of the formal property rights systems to informal settlements as one of the ways to 'transform slum land into urban assets' (Roy, 2014). Thus, it can be argued that not only are slum-free cities processes of modernity, but they also shift how we interpret the urban. If we take our cue from Roy's (2014) argument that slum-free cities can then be understood as part of a new paradigm of inclusive growth³⁸, deployed to govern megacity and its spaces of poverty. This interpretation of the urban, in modernization terms, perpetuates our worldview of the urban as a northern construct, but also misinterprets what informality is and misconstrues the formulation of suited interventions.

³⁸ Roy found that inclusive growth, as articulated in various discourses and agendas in India, is a vision of market-oriented inclusive growth. It is premised on the argument that the benefits of economic growth can be extended to 'currently excluded sections', often through reforms in 'governance and accountability' (Deloitte, 2011: 3 in Roy, 2014).

- Can there be a sustainable city be without slums?

Putting the spotlight on the Slum-free Cities – with its narrative governance interventions that promotes out-governing informality – is important to draw parallels from which to locate spatial representations of informal spaces in the environmental governance logic of the sustainable city.

Although informal spaces have, for decades, been used to site urban governance, they have also become new geographies of governance (Jonas & Ward, 2007; Brenner & Schmid, 2015) for the urban imaginaries of sustainable cities. For example, deploying formalization in post-apartheid urban governance discourses as an indispensable state spatial practice (Dikeç, 2007) serves the purpose of reimagining informality in the sustainable cities' debates. Thus, for cities of the South, sustainability has a different context considering that the ideas of sustainable cities, in relation to the South, are increasingly being articulated in terms of measures to out-govern informality. Thus, I argue that ideas of a slum-free city – whether through upgrading or eradication – are mainly driven by the arguments that informality negatively impacts city sustainability (You, 2007).

Such depoliticized interventions are the main contention in Swyngedouw's (2009) arguments on the 'postpolitical³⁹ condition and postdemocratic arrangement', one in which there is consensual avowal of the real politics (Swyngedouw, 2009). But the politics matter in sustainability. Swyngedouw (2009) believes that 'sustainability' in society can be achieved only when the political is in place. In relation to ideas of SFC, the Anthropocene meets the apocalyptic, dystopia. What then follows are compromises, managerial and technical arrangements, directed at addressing issues – such as urban informality – generally staged and accepted as problematic. I draw parallels with formalization in Tshwane, to argue that interventions directed at informality undermine the real politics of informality, leading to the further marginalization of informal spaces. In consequence, while the image of informality has changed in the discourses and spatial representations of formalization, the environmental shortcomings of these neighbourhoods – in relation to the areas in the urban network – remain marginalized from the city's environmental governance discourses and practices. Thus, a sustainable 'slum-free city' is a sustainable city without politics as it suppresses the real politics of informality. This also means reviewing the definition of a sustainable city which is framed in terms of sustainable development.

³⁹ "Under a postpolitical condition: 'Everything is politicized, can be discussed, but only in a non-committal way and as a non-conflict. Absolute and irreversible choices are kept away; politics becomes something one can do without making decisions that divide and separate" (Swyngedouw, 2009: 609)

2.4. 'Aporias' of the Sustainable City: Is a City without Slums a 'Just' City?

The argument in the previous section evoked questions about justice and the reproduction of subaltern spaces within the logic of the sustainable city paradigm. Roy, coming from a postcolonial perspective, drew from the policy intervention of slum-free cities to illustrate how subaltern spaces and classes are imagined and intervened on in postcolonial cities. I argue that, though it is possible to imagine cities without slums as a mode for justice –but not one in which capitalism is just (Sam Adelman, 2013:2). Particularly, considering Sachs' (Sachs, 1999) reminder that justice is incompatible with the unfettered pursuit of faster and more economic development.

With that in mind, this section opens with some reflections on the conceptions of the idea of justice. Here, I seek to develop a particular conception of justice that considers the politics of injustice. To do this, I assemble the conceptions of justice as recognition, justice as distribution, justice as participation and justice, making it possible to look at them anew in a framework of environmental justice. To move this debate forward, I then revisit the foundational framing of environmental justice, as a prelude to rethinking the current framing of the environmental problem. I end off with a discussion on environmental governance processes, especially amid rising calls to shift from sustainability to a 'just' sustainability in urban governance processes. Inspired by Swyngedouw's (2009) readings on the postpolitical condition, I argue that this requires that we revisit the politics of environmental governance and reconsider whether the justice can still be thought of in an environment in which the proper politics are reduced by postpolitical policy consensus (Swyngedouw, 2009).

2.4.1 Theories of justice

The arguments that 'justice is a contested justice' (Schlosberg & Carruthers, 2010) have been widely debated in literature. While it is not my aim to rehash those debates I, however, still wish to remind the reader of at least, three ways, in which the idea of justice has been refined. I believe that drawing from these divergent conceptions of justice can highlight tensions and contradictions on how justice has been considered, and also help unravel the politics of justice. Most prominent to the understandings of justice is Rawls' (2013) conception of justice, which has been preoccupied by the need to address the unjust material distributive. Rawls advocates for the socially just distribution of goods in society including access to goods by the most marginalised members of society. In his subsequent work, *Justice as Fairness* (Rawls, 2003), Rawls' reappraisal of the idea of justice reconciles principles of liberty and equality. He argues here that everyone is entitled to individual equal rights and equal basic liberties compatible with similar system of liberty for all.

For Rawls, citizens are equal by virtue of having the capacities to participate in social cooperation. But this Rawlsian reconfiguration of the idea of justice could still not contribute enough towards the understanding of the contemporary concerns of justice. Not only was Rawls' basic conception of justice challenged by other scholars, but it was also refined, and the scope of its application expanded. The interpretation of justice presented by Iris Young, for instance, challenged the prevailing reduction of social justice to distributive aspects of justice. In her book *Justice and the Politics of Difference*, Young (Young, 1990) objects to the emphasis placed on matters of distributive justice. In particular, Young urges for widening the scope on the concept of justice in ways that embrace decision-making, from which to pursue the idea of misrecognition as another way of understanding injustice. Young's contention was particularly with how the issue of an inclusive participatory framework was not adequately addressed by democratic theorists. To illustrate, she questioned the assumption of a homogenous public, arguing for the need to consider the institutional arrangements and their misrecognition of people who did not culturally identify with white European male norms of reason and respectability, for example.

The introduction of the capabilities approach to justice also offered a broad and inclusive definition. Developed by Amartya Sen and Martha Nussbaum, this approach to theory of justice shifted the focus on equitable distribution as a sole understanding of the idea of justice. Instead, the focus here is the capabilities necessary for people to function fully in the lives they choose themselves (Nussbaum, 2002; Sen, 2005). To be able to do this, the capabilities theory to justice's central argument was that *"we should evaluate the justice arrangements not simply in distributive terms, but more particularly in how those distributions affect the ultimate well and functioning of people's lives"* (Schlosberg & Carruthers, 2010: 15). Furthermore, this theory suggested that for people to reach their full potential- and thus be better off- certain capabilities need to be activated for their advancement (Schlosberg & Carruthers, 2010). I am in harmony with Schlosberg & Carruthers' (2010) view that the *"capabilities approach expands on the equity-based notion of justice, yet remains squarely liberal, focusing on the freedom and functioning of individuals"*. However, Sen (2005) and Nussbaum (2001) defend this criticism by illustrating the expandability of the capabilities approach to provide the social and political bases for

the development of a fully function life, such as guaranteeing the protection of minority populations from being out deliberated. The capabilities approach to justice has been drawn into environmental justice arguments. For instance, Schlosberg & Carruthers (2010) are convinced that the capabilities approach works to define environmental justices. In a local example of environmental justice, Dixon & Ramutsindela (2006) argue for environmental justice policies to consider apportioning capabilities to its beneficiaries.

While I sympathize with this position, in this thesis I am not using justice as capabilities. Rather, I found Fraser's trivalent framework of justice relevant to analyze the situation of formalization and environmental justice in the City of Tshwane. One of the reasons is because I am interested in the activities of the municipality in relation to governanace processes. Coincidentally, the Trivalent model of justice analyses the role of the state and public powers in justice, an aspect which the capabilities framework seems to overlook. Fraser's trivalent framework to justice [see table 2. 2] works towards bridging participation, misrecognition and maldistribution. Fraser proposes that for participation parity to occur we need to equally address the politics of recognition, the politics of redistribution and the politics of representation. Hence, for Fraser (2008), the struggles for injustice are mediated by dismantling institutionalised obstacles that hinder participation parity in society. Fraser's trivalent approach to justice illustrates that one can be wrongly excluded from consideration for distribution, recognition and representation. Fraser refers to the exclusion from order consideration for first-order claims against misrecognition and maldistribution as a form of *misframing*. That means, fundamentally, all three definitions of justice are relevant to my work [See Chapter Six for application of these]. Secondly, this current work is located in South Africa, a geographical setting where issues of recognition have historically not been at their best due to the recognition and misrecognition of categories of people by the state for centuries. Here, I particularly refer to the evolution of the political systems from colonialism to the vile apartheid system which thrived on racial *misframings* [see table 2. 2] of the Black population. That is now changed by democratization⁴⁰ but to what extent.

At the core of misrecognitions are institutional processes that devalue some people and place them in comparison with others (Wayessa & Nygren, 2016). Thus, the role of the state regarding misrecognition, the role of the state in redistribution, and it's the role regarding democratization and changes in recognition are some of the reasons that make Fraser's Trivalent conception of theory framework more relevant to my case. Furthermore, procedural justice being one of the gains of post democracy in South Africa, meant that people in a democratic South Africa were given a voice and became part of the processes of governance. As a result, a lot has been said [and the construction of the-new citizen who should take part in the building of democracy and, therefore procedural, justice. Thus, I echo the arguments made by Fraser et al. (2003); Schlosberg (2007), that perspectives on justice should address the processes that produce and legitimize practices of maldistribution, including cultural recognition.

⁴⁰ In 1994 South Africa became a democratic state, following decades of apartheid rule, which was also preceded by an era of colonization.

	POLITICS OF REDISTRIBUTION	POLITICS OF RECOGNITION	POLITICS OF REPRESENTATION
	We can use the redistribution perspective to bring into focus the economic dimensions of what are usually considered simply as cultural matters.	We can use the recognition perspective to identify the cultural dimensions of what are usually considered as economic arrangements.	Misframing
The collective identities	In the politics of redistribution the collective, will be differentiated by virtue of the economic structure, as opposed to the status order, of society.	On the contrary, an ideal-typical mode of collectivity that fits the politics of recognition is rooted wholly in the status order.	One can be wrongly excluded for consideration for distribution, recognition and representation (Bozalek & Boughey, 2012)
	The problem is that, left unattended, moreover, class misrecognition may impede the capacity to mobilize against maldistribution		
Subject of injustice	-Included are racialized groups that can be economically defined: for example, marginalized members of a racialized underclass, who are largely excluded from regular waged work, deemed “superfluous” and unworthy of exploitation. -Also included, finally, are the complexly defined groupings that result when we theorize the political economy in terms of the intersection of class, “race,” and gender.	-rather by the relations of recognition, they are distinguished by the lesser esteem, honor, and prestige they enjoy relative to other groups in society. Typical case: the low-status ethnic group, whom dominant cultural patterns of interpretation and valuation mark as different and less worthy, to the detriment of group members’ social standing and their chances of winning social esteem	Set boundaries of who in excluded and who is included
Remedy to injustice	Economic restructuring of some sort.	Cultural or symbolic change.	Political
	Participation parity would be prevented or constrained if by economic structures where the is maldistribution of resources or where there is deprivation (Bozalek & Boughey, 2012).	Participation parity would be prevented through hierarchal status order in which institutionalized patterns of cultural value depreciate certain attributes associated with people of the activities in which they engage (Bozalek & Boughey, 2012).	

Group differences	The point of this politics, accordingly, is to abolish, not to recognize, difference	The politics of recognition assumes either of two aims: in the first case, it seeks to celebrate, not eliminate, group differences; in the second case, it aims to deconstruct the very terms in which such differences are currently elaborated	All three dimensions of economic, cultural and political – must be present for participatory parity to occur (Bozalek & Boughey, 2012)
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Table 2.2: Fraser’s Trivalent Collectives

2.4.2 Rethinking the justice of environmental justice: populist environmentalism and the evacuation of the political

- Environmental Justice draws the ‘environment’ to the debates of justice

The rise of the environmental justice shifts and advances perspectives on justice, foregrounding the environment as a key element in claims and discourses on justice. In the words of Low & Gleeson (1998) *“the question of justice is today being reshaped by the politics of the environment”* (p:1). Encouraging us to further reflect how we think and engage the environment in context of environmental justice is Schlosberg’s (2013) reminder that ‘the idea of environmental justice challenged the very notion of ‘environment’. The efforts to reverse the conservation conception of the environments are becoming more pronounced showing the understanding of the “environment as more relational” [David Schlosberg in a web seminar, May 2021]. Illustrating this, Alston (2010) points us to how environmental justice discourses dislodged the narrow and limited conception of the environment through ecological attributes such as the wilderness, greening and natural resource. What we now see is that the ‘environment’ has become more discursively inclusive, it became ‘where we live, where we work and where we play’ (Alston, 2010, p. 14). This reconceptualization of the environment suggests that we need to rethink the current framing of the environmental problem, to account for broader socio-environmental contexts. Meaning that reconsidering how environmental justice frame its perspective of justice.

- What is environmental justice?

To do that, we need to be clear on our conception of environmental justice⁴¹. The multiple conceptions of environmental justice abound in literature, suggests that it is a contested concept (Agyeman & Evans, 2004), both in its definition and application⁴². Common readings on environmental justice such as those presented by Schlosberg (2013); Agyeman (2008) put forth the definition of concept as being about the environmental marginalization of some communities, particularly in neighbourhoods populated by people of colour and the poor, through a disproportionate exposure to environmental risk. Thus, environmental justice raises such issues of misrecognitions and inequalities in the environmental production as a miscarriage of justice. Environmental justice has also been interpreted through questions of procedure and participation. Bullard & Johnson (2000), for example, define environmental justice as *‘the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies’* (558). Schlosberg’s (2013) re-conceptualisation of environmental justice opens up new ways of understanding environmental justice as a framework open to plurality. What

⁴¹ The concept of environmental justice is not be conflated with environmental sustainability. The distinction of environmental justice rests on its interpretation of the ‘environment’, as elaborated above.

⁴² Foremost, Agyeman (2002), brings to our attention the two different, yet correlated, dimensions of environmental justice. These dimensions situate environmental justice as both a tool of local mobilization for justice and national policy principle for justice. In relation to its application Walker (2009), for instance, points out how the concept *The first conjunction of the two words to provide a label for specific forms of political activism is universally attributed to campaigners in the USA, working to resist the imposition of toxic and polluting facilities in minority and poor communities. In the context of this study, I engage with environmental justice as (word). The conundrum on the definition of environmental justice is, I argue, can be explained by the fluid interpretations of justice in environmental justice discourses, which can arguably be attributed to its meaning drawn from diverse interpretations.*

emerges from this plurality is that it equally considers justice as recognition, in the same way as it interprets the understanding of justice as participation. In this way, this plural conception of justice extends beyond the conventional narrow framing of justice resonates with Schlosberg's (2013) call that we understand environmental justice to embody a variety of themes on justice.

- **The justice of Environmental Justice: the apolitical politics of Environmental Justice and its apolitical framing of the environmental problem**

Fundamentally, environmental justice draws its basic principle of justice from Rawls' ideas of distributive justice, which centres resource distribution as a key understanding to justice. This framing of justice explains why the basic conceptualization of environmental justice was fundamentally about the distribution of environmental externalities (Low & Gleeson, 1998; Cock, 2004). Environmental justice's framing of the environmental problem, in racial terms, can be traced back to its formulation in the United States (Banerjee, 2014; G. Walker, 2009), within the context of colonial, white settler supremacy. Scholarly debates on environmental justice have extensively captured how the politics of race and racism became fundamental to the early conceptualization of the concept. These realities have been particularly demonstrated through the siting of toxic waste facilities near African American spaces (Bullard & Johnson, 2000; Holifield, 2001; McDonald, 2002; Walker, 2009; Schlosberg & Carruthers, 2010; Schlosberg, 2013). This framing of justice has been useful in highlighting the importance of environmental justice through politics of race, particularly to the South African context with its history of racial apartheid and its related maldistribution of environmental resources [see Patel below]. Nonetheless, there have been some arguments against this narrow framing, considering it how enforces a static understanding of the justice of environmental justice in different contexts. Though I sympathise with others, including Bullard (1996) that the framing of the environmental problem should move beyond its current understanding as a siting of toxic facilities, my argument does not align to views that downplay race⁴³. On the contrary, it seeks to invigorate the racial politics that seem to have escaped environmental justice's framing of justice. I am rather inspired by Swyngedouw's (2009) readings on the post political condition. Such an approach of speaking at a distance from race may help us to 're-centre the politics proper of environmental justice' (Swyngedouw, 2009) in two ways:

Firstly, this approach might help us to situate environmental justice in the Global South context, by asking relevant political questions. The idea of environmental justice has not been place-bound. The concept has widely diffused⁴⁴ to the Global South (Walker, 2009; Lawhon, 2020), including South Africa (Bullard, 1996; Cock, 2004; Patel, 2009)- [also see box 2. 3 for narratives on the EJ movement in South Africa]. Thus, the fixation with a static framing of the environmental problem stifles our understanding of the environmental justice in the global south contexts. Some southern scholars have already started to point out these limitations and have called for us to 'unbundle' (Lawhon, 2020) from the northern

⁴³ My argument here does not sympathize with those that seek to undermine race and racism in environmental justice (EJ) discourses. Because the concept of racism remains important in locating injustice for in post-apartheid South Africa and for my study. Apartheid, I argue, was an environmental injustice against the Black people. Hence, we cannot leave race out of EJ debates in South Africa. As will show in chapter 4, the apartheid system's land dispossession from the Black communities left a legacy of unequal distribution of environmental bads and goods (Patel, 2014).

⁴⁴ Walker (2009, p. 361) lists no fewer than 37 countries in which the environmental justice frame has been applied.

dominant conception. Problematizing the travels of the term environmental justice to the global south, Lawhon (2020) in particular, is concerned with how we might better account for the benefits and limitations of travels through unbundling the components of theory. Thus, calling for casting the understanding of the environmental problem beyond its current emphasis on sitings of toxic waste facilities can be useful to southern theory in two ways. Firstly, it offers an opportunity to situate the environmental problem, and help us ask different and relevant questions about the environmental problem, beyond race. We may for example, as suggested by (Schlosberg, 2013), go deeper and ask specifics on why certain communities are devalued in the first place, instead of simply relegating the cause to racial politics. A local example can be drawn from Dixon & Ramutsindela (2006), who have questioned the relevance of environmental justice on informal spaces in South Africa from a 'capabilities approach' (Nussbaum, 2001; Sen, 2005), by interrogating its implications on the agency of the informal dweller in achieving environmental justice. They suggest that the current goal of environmental justice⁴⁵, to address material deprivation, is misdirected. Thus, situating the goal of the concept makes it more inclusive of various existing global challenges and developments.

The Environmental Justice Networking Forum (EJNF) was the face of the rise of environmental justice in post-apartheid South Africa (Myers, 2008). However, the EJNF environmental justice battles lacked synergy with the socio-environmental issues inherited from the apartheid governance.

The interpretation of environmental problem in northern context as the 'unequal distribution of waste pollutants and siting of toxic waste facilities' (Holifield, 2001), is evident in South African environmental debates. For instance, there is focus on how government racially motivated policies ensured that African communities are located close to heavy industrial facilities. Citing the case of the Durban refinery, one of the few examples given prominence in South African environmental justice debates, Lawhon (2020) raises concerns on how this case has overshadowed other more egregious examples of environmental injustices.

Without undermining the importance of the Durban refinery, this account maintains an understanding of the environmental problem within its northern framing. As a result, informal settlement related environmental issues remain subdued. As I will demonstrate through the case of Tshwane, waste management in informal settlements remains a serious exemplar of environmental injustice in the global South, yet its framing as an environmental injustice is limited in current literatures.

Box 2.3: *The rise of EJ movement in South Africa*

⁴⁵ The current focus on environmental justice in South Africa, in context of informality, is to increase access to basic services such as water and sanitation.

Secondly, speaking at distance from race may also help us recontextualize the current framing of the environmental problem, which I argue in the case of SA is stifled by the current distribution focus of environmental justice on addressing material deprivation⁴⁶. For instance, environmental justice has for long pursued questions of ‘who benefits from natural resources and who bears the costs of externalities’ (Hallowes & Butler, 2002). Instead, what is needed is a broadening of the debates around what constitutes the environmental problem. Questions such as those raised by Agyeman (2008), as to why, for instance, is a human-made phenomenon like global warming – which may kill hundreds of millions of human beings over the next century – considered environmental? Why are poverty and war not considered environmental problems while global warming is? (Agyeman, 2008). Although questions around the confined framing of the environmental problem is a global oversight, they are particularly necessary to ask in relation to the global South as they can raise the proper political moment (Swyngedouw, 2009), and in consequence bring to the spotlight the apolitical approach to environmental justice. Swyngedouw’s readings on the post political condition, from which he condemns the ‘false’ political rise of environmental justice (see table 2. 3) suggests that the politics of environmental justice use populist tactics to instigate desirable change. In Swyngedouw’s view, environmental justice needs to radically recenter its politics in order to tackle questions on the urban environmental justice and to create differing yet equal socio-ecological urban assemblages.

1	Populism invokes ‘THE’ city and ‘THE’ people, if not humanity as a whole in a material and philosophical manner. All people are affected by environmental problems and the whole of humanity (as well as large parts of the non-human) is under threat from environmental catastrophes (Swyngedouw, 2009: 611).
2	Populism is based on a politics of ‘the people know best’ (although the latter category remains often empty, unnamed), supported by an assumedly neutral scientific technocracy, and advocates a direct relationship between people and political participation (Swyngedouw, 2009: 612).
3	Populism customarily invokes the spectre of annihilating, apocalyptic futures if no direct and immediate action is taken (Swyngedouw, 2009: 612).
4	Populist tactics do not identify a privileged subject of change (like the proletariat for Marx, women for feminists or the ‘creative class’ for competitive capitalism), but instead invoke a common condition or predicament, the need for common humanity-wide action, mutual collaboration and cooperation (Swyngedouw, 2009: 612).
5	Populist demands are always addressed to the elites. Populism as a project always addresses demands to the ruling elites. It is not about changing the elites but calling on the elites to undertake action to redress particular injustices (Swyngedouw, 2009: 612).
6	Postpolitical populism is associated with a politics of not naming in the sense of giving a definite or proper name to its domain or field of action (Swyngedouw, 2009: 612).

Table 2.3: Characteristics of Populist Tactics

⁴⁶ Similar to Ramutsindela and Dixon, I am in no way undermining the unjust geographies [informal spaces] produced by the apartheid regime process.

In the case of South Africa, the proper politics of environmental justice will allow us to pose questions about the indigenous background of urban informality (Dixon & Ramutsindela, 2006). I argue that understanding the proper politics can also unearth other forms of injustice. Beyond the capabilities approach argued by Dixon & Ramutsindela (2006) – misframing and misrecognition, I later argue, are very prominent to the environmental injustice issues in the South African context.

The nature of environmental politics in South Africa can be traced through two defining historical moments – the colonial and apartheid periods. Traces of environmental justice in South Africa during its colonial times point to the ‘neoliberalization of nature⁴⁷’ (Logan & Wekerle, 2008; Rattu & Veron, 2016). During the apartheid regime, environmentalism effectively operated as a conservation strategy that neglected social needs, as noted by Cock (2004). In her rendition of the environmental injustice history during the apartheid regime, Patel (2009) unpacks how unjust processes of governance⁴⁸ perpetuated and maintained environmental injustices. She particularly reflects on the distributive consequences of environmental policy, characterized by government’s massive capital injection to maintain a strong biodiversity conservation pristine (Patel, 2009). Hence, looking at the procedural justice element of environmental justice, there are questions to be asked about unjust processes. Questioning the unjust processes should also include confronting the real politics of this policy strategy, which in this case was associated with forceful land dispossessions and tenure deprivations for many Black South Africans, mostly notable in debates on the production of informal spaces.

The implications of unjust processes on the participation of the poor and marginalized in decision-making has always been key in environmental justice discourses. As noted by Lee (1995) it was the environmental justice discourses that profoundly elevated our understanding on the value of public participation and accountability in formulating public policy and environmental decision making. Finding roots from these understandings were arguments from others, including Bullard & Johnson (2000), who noted how exclusionary policies and practices manipulated the participation of some individuals and groups from participation in decision making. Hence, Patel (2009) urges us to look at injustices by examining the relationship between power, knowledge and rationality, and the effects these have on the engagements of the public in decision-making processes.

I borrow from Roy’s (2010) concept of poverty capitalism⁴⁹ to demonstrate how this form of marginalisation can be instituted through the manipulation of knowledge. To contextualize this,

⁴⁷ My conception of the neoliberalization of nature draws from Rattu & Veron (2016) who understand neoliberalization of nature to “imply dispossessing people from natural resources through the practices of privatization and commoditization of parts of the environment” (154). Furthermore, I also concur that Neoliberalization here does not imply the rolling back of the state, but the rolling out of the state as a facilitator of environmental management, including as a creator and guarantor of environmental markets (Rattu & Veron, 2016). At that stage, the apartheid regime was more about dispossessing Black South Africans of land. However, as my case of formalization in the City of Tshwane will show, in a democratic South Africa, the neoliberalization of nature in relation to informal spaces points towards a rolling back of the state.

⁴⁸ Here Patel (2009: 94) specifically “examines the role of environmental assessment procedures, specifically Environmental Impact Assessments [EIA’s], in shaping outcomes at the local level to understand how injustices are perpetuated and maintained”.

⁴⁹ Poverty capital is not only financial capital, but also another kind of advantage and distinction. It sheds light on how powerful institutions control capital, or circuits of profit and investment, as well as truth, or authoritative knowledge about poverty. Instead, Roy (2010) wants us to understand poverty capital as the currency of poverty experts, those who are authorized to

McDonald (2002) explains how during the apartheid era most black South Africans paid little attention to environmental debates. Their relationship with environmental justice was estranged, the environment was seen to be a white, suburban issue of little relevance to the anti-apartheid struggle. (McDonald, 2002). This pointed to a cognitive injustice, where inequity exists between different ways of knowing and different kinds of knowledge (Santos, 2014). Thus, for environmental justice to be relevant requires the framing of the environmental problem to also speak to the politics of knowledge deprivation. Imparting this form of capital should be deliberative. After all, indicating that environmental consciousness does not fall on one's lap but is rather a political process. Thus, reintroducing the deprivation of knowledge to the framing of the environmental problem is of particular interest to this study as it seeks to interrogate how processes of governance problematize the very same environment they seek to intervene.

The rise of environmental justice in post-apartheid South Africa and the overhauling of environmental governance processes reflected a new envisioning of the environmental problem as social inequality is embodied in environmental conditions (Cutter, 1995). For, instance while the revamped Environmental Impact Assessment⁵⁰ (EIA) became a way to address procedural justice, discourses on distributive justice were nonetheless left behind (Walker, 2009). However, I concur with Patel (2009) that environmental justice cannot simply be achieved through equal and fair distribution of benefits and costs. It needs goes to the heart of how power relations define and reproduce development itself (Hallowes & Butler, 2002) a position firmly articulated by Swyngedouw's (2009) postpolitical condition.

In sum, the interpretations of environmental justice illustrate that the current framing of justice, in distributional terms, does little to address the injustice experienced by informal spaces, as it neglects to address other elements of justice. This is due to the central focus of distributive justice being on addressing the material deprivations associated with policy interventions such as slum-free cities and formalization. However, what the above discussions show is that it is only through the situating of the environmental problem that the political root of the environmental injustice at hand can be attended to. In the end, reintroducing the deprivation of knowledge to the reframing of the environmental problem is of particular interest to this study as it seeks to interrogate how formalization, as a processes of governance, imparts knowledge for environmental decision-making. Thus, looking at how cities of the South, with their sprawling informal settlements, have unique environmental justice issues of their own should be considered seriously, even from a theoretical point of view.

produce authoritative knowledge about poverty and its alleviation. This is not simply knowledge; this is the "truth"—the forms of knowledge that come to be understood as certain, legitimate, and undeniably correct [Roy]. According to Roy, the distribution of such capital exerts a structural effect, conferring power over a system of social relations.

⁵⁰ *The new EIA was released in 2006. This is a technocratic environmental management process. It places focus on discourses of distributive justice. I argue it does not address the real politics of environmental justice.*

2.4.3 Intersections of environmental justice and sustainability: Post politics of a Sustainability to 'Just' Sustainability?

In recent years, what has become apparent are ecological calls that insist on the possibility of marrying environmental justice and sustainability in governance processes. These are inextricably linked⁵¹- meaning that, we cannot address one without engaging the other - as has been instigated by scholars such as Agyeman (2008). This inextricability is captured in Goldman's (1993) suggestion that *"sustainable development may well be seen as the next phase of the environmental justice movement"* (p:27). Furthermore, others including Lee's (1995) are of the view that environment justice presents a new paradigm to facilitate sustainable communities⁵². A flurry of scholarly writing has also begun to debate the intersections of sustainability and environmental justice in governance processes. These arguments are mainly instigated by claims that public policy does not disproportionately disadvantage any particular social group and must be a precondition for-the move toward just and sustainable societies (Agyeman & Evans, 2004).

- What is needed is a paradigm shift -From Sustainability to 'Just' Sustainability

The dogmatic difficulties of linking sustainability and environmental justice in policy discourses are recognized. There have, however, been some conceptual advances in literature envisaging the feasible mutual interdependence (Agyeman et al, 2002) between sustainability and environmental justice. Agyeman & Evans' (2003) novel concept of a 'just' sustainability⁵³ has sought to bridge the gap between sustainability and environmental justice, in turn providing a discourse for policymakers and activists (Agyeman & Evans, 2004). The emerging concept of transformative sustainability or 'just' sustainability Agyeman et al. (2002) explores the nexus between ideas of sustainability and environmental justice and, their practical actions. The concept calls for sustainability to be transformative, meaning it should equally serve all social classes (Warner, 2002). For Agyeman (2008), a shift from sustainability to 'just' sustainability is plausible provided we see the critical intersections between race and class, and equity and justice taking their place in the framing of sustainability. This means that just sustainability will create opportunities for inclusiveness, diversity, equity, and equality in sustainable development efforts. Moving from sustainability to a just sustainability, as Agyeman (2008) warns us, cannot be achieved through simple attempts to amend existing environmental policies. Instead, just sustainability requires justice and equity should be at the heart of the sustainability debates (Agyeman, 2008).

⁵¹ "Cities produce 80% of the world's greenhouse gases, express often the most pervasive forms of socio-environmental injustices and are central to producing more sustainable environmental futures" (Swyngedouw 2009:602).

⁵² In contradiction to environmental injustice, which reverses the gains of sustainable development, for example, Agyeman (2008) argues that environmental injustice is a factor with negative implications on sustainability impacting everyday functioning and wellbeing of communities. For Agyeman, environmental despoliation and degradation does not happen without triggering issues of social justice, equity, rights and people's quality of life in its widest.

⁵³ "The 'Just Sustainability Paradigm' is an emerging discursive frame and paradigm. It is not, however, rigid, single and universal, thereby avoiding the charge of essentialism. It links to both the green/New Environmental Paradigm and the brown/Environmental Justice Paradigm. In this sense, it can be seen as being both flexible and contingent, composed of overlapping discourses that come from recognition of the validity of a variety of issues, problems and framings" (Agyeman, 2008: 753).

The just sustainability paradigm foregrounds four related focal areas :

- Quality of life
- Present and future generations
- Justice and equity
- Living within ecosystem limits

Box 2.4: Just Sustainability Paradigm (adapted from Agyeman, 2008)

- intersecting sustainability and EJ in policies, programmes: a challenge for just sustainability

While such visions seem to advance principle of and equity in governance debates, reconciling environmental justice with sustainability in governance remains a challenge. This is despite the fact that ideas of sustainability and justice have been increasingly influencing policy changes at global level (Agyeman et al., 2002). These discrepancies are illuminated in the sustainable development policy which, according to Agyeman et al. (2001) is still not reflective of the central principles and practical approaches of environmental justice.

Various critical socio-theoretical perspectives have been mobilized to account for this disjointed relationship. Cock (2011), for example, responded with a Marxist claim that sustainability discourse is silent on justice because it has been appropriated by neo-liberal capitalism. This neoliberal conception of sustainability is also criticized for its current framing of the environment as mainly a green concern that underplays other social issues such as equity (Agyeman, Bullard, & Evans, 2002; Warner, 2002; Agyeman, 2008). Another argument attributes this disaggregation to the temporal interpretation of the two concepts. For instance, Dobson (1999) has argued that:

“Sustainability obliges us to think about sustaining something into the future, and justice makes us think about distributing something across present and future”: (p:5).

It is therefore not surprising that, despite their seemingly solid scientific consensus [see Swyngedouw, 2009] on environmental management, the focus of proponents⁵⁴ of sustainability and environmental justice are differentiated by temporality. Another disjointedness shaped by the political incompatibility of the two ideas of sustainability and environmental justice emerges as overbidding scientific consensus that bind. This argument resonates with the argument of Agyeman et al. (2002) that there has been insufficient interpenetrations of values, framings, ideas and understandings of the environment. What is evident here is that the two concepts are rooted in polar environmental agendas. As an example, the environmental justice agenda is mainly associated with the

⁵⁴ Advocates of sustainability have concentrated on ‘futures’-on developing new policy and strategic directions’- environmental justice advocates (Agyeman et al., 2002: 81)

brown/Environmental Justice Paradigm⁵⁵. This paradigm is one of the factors that has given grounding to the grassroots organising advocacy and action-oriented response of environmental justice. In this way, environmental justice remains a highly politicised rhetoric. These polar politics of sustainability and environmental justice have been also brought to the spotlight–Marcuse’s (1998) view that sustainability works differently in environmental debates.

On the other hand, the sustainability agenda has been advanced in the more formal policy-making arenas of governments (Agyeman et al., 2002) in a clinical depoliticised manner. I argue that the conflicting political rhetoric of the two concepts, not only suggests and posits sustainability as a more befitting policy object than environmental justice, but these explorations of the complex relation between the two concepts enable the recognition of the contradictions in environmental rationalities. Kaika & Swyngedouw (2012) argue that this emerging global environmental imaginary, which urges for technical fixes to solve an imminent global catastrophe, effectively neuters environmental justice as a radical political project by producing a “post-political” moment in which the only rational goal is to maintain the status quo (Swyngedouw 2009). In my view sustainability and environmental justice are embroiled in discursive ‘environmental politics’⁵⁶ (Swyngedouw, 2009).

Nonetheless, the wheels are in motion, as environmental justice and sustainability concepts are being translated into public policy (Agyeman et al., 2003). Warner’s (2002) examination of this parallel relationship between sustainability and environmental justice, in some of the major urban centres in the United States, revealed that only a few cities have incorporated environmental justice into their sustainability planning. In a similar exercise, to illustrate this environmental justice-sustainability practice gap, Pearsall & Pierce (2010) found that while 80 of the 107 cities they surveyed only 31 integrated environmental justice as a conceptual component of their sustainability plan. The city of San Francisco, for example, was the only urban centre with notable demonstrable efforts towards linking sustainability and environmental justice Pearsall & Pierce (2010).

Southern cities also experience similar relational complexities between sustainability and environmental justice in governance discourses. Recognizing this gap, Myers (2008) set out to explore this “*disconnection between sustainable urban development and environmental justice in sub-Saharan African cities*” (p:705). Myers found that, in case of South Africa with its substantial critical-left scholarly community, in efforts to critique sustainable development policy and environmental justice rhetoric, many were still trying to move forward toward urban environmental justice, and to counter neoliberal. Hence, despite its firm legislative rooting, environmental justice struggles to find footing in the local sustainability discourses. As Patel, (2009); Walker (2009) highlight, environmental justice has become a constitutional commitment. Furthermore, the concept of sustainability has been in the discourse of development in South Africa for some time. However, there remains little evidence that both the social and environmental justice dimensions have been fully addressed Patel (2009). For Walker (2009), this

⁵⁵ *Brown/Environmental Justice Paradigm: Suggests that poorer countries in the South are proponents of a ‘brown’ agenda of poverty alleviation, infrastructural development, health and education (Agyeman, 2008).*

⁵⁶ *Environmental politics is a politics legitimated by a scientific consensus⁵⁶ which, in turn, translates into a political consensus.*

development can be attributed to the technical and bureaucratic approach to sustainability. For example, EIAs⁵⁷ remains the main political response (Swyngedouw, 2009). My own observation in Tshwane also indicates that sustainability and environmental justice are also moving in a parallel relation in urban policy discourses.

⁵⁷ *The wholesale implementation of the EIA has been brought to question. Oelofse's (2005: 447) deconstruction of Environmental Impact Assessment as still lacking in questions of 'development for whom' and in the inclusion of the poor and marginalized.*

- **Summing up: What ‘just’ sustainability means for my research and environmental governance?**

In the meantime, proponents of a just sustainability, including Agyeman & Evans (2004), want us to view the notion as having a transformative role. A shift from sustainability towards ‘just’ sustainability can be useful in two ways. Firstly, it can help us interrogate governance instruments for their contradictions, considering Marcuse’s (1998) caution that policies and programmes⁵⁸ can be simultaneously socially just and sustainable and unjust. Secondly, just sustainability makes us rethink how we position urban informality in environmental governance discourses. This is despite the consensus positing informality as a clear and present danger to the world, that requires urgent action (Swyngedouw, 2009), as informal spaces remain marginalized in environmental governance.

The idea of a SFC, with its emphasis on ‘righting of historical wrongs and elimination of contemporary injustices’ (Adelman, 2013:29) through housing infrastructure and basic services also distorts the place of informality in the sustainable urban development agenda, due to an existing disjuncture between informality and sustainable development. For a long time, most sustainable development policies were directed toward formal sector activities regulated by the state, without recognizing the role of informal activities (Briassoulis, 1999). In the end, the understanding of the formal-informal dichotomy has value when analysing urban environmental governance. For a long time, the hierarchy of formality as the norm and informality as abnormal and/or inferior has underpinned repressive policy responses, such as inadequate service provision or the eviction of informal settlement residents (Banks et al., 2020; Goodfellow, 2018). This not only highlights the ways in which informal activities continue to be alienated in environmental governance discourses, it also raises questions on how justice is framed in sustainability discourses. The shift to formalization suggests a move to dissolve the bridge separating informal and formal in policy rhetoric.

In sum, considering the theoretical foundation of ‘just’ sustainability being rooted in the definition of sustainability Agyeman et al. (2002) – with its apocalyptic perception of informality and environmental justice with its misdirected politics – necessitates the production of further knowledge to reposition the relevance of environmental justice in sustainability goals. This is especially true considering that more and more cities in the global South, including Tshwane, are pursuing urban sustainability while concurrently facing high levels of urbanized informality.

⁵⁸ Nhamo (2005) cited in Patel captured this contradiction by illustrating how ‘the attempt to reduce the number of plastics in the environment can –for instance by introducing a policy regulating plastic bags through retail. Nhamo concludes that, while this policy shift has had positive gains for the environment, thousands of retrenched workers have subsequently lost their livelihoods.

2.5 Intersecting Sustainability, Informality and Justice towards a Nexus

The preceding sections were progressively building the nexus of key concepts of informality, sustainable cities and environmental justice, that are core to my research question. I first unpacked the idea of sustainability as a universalised paradigm for sustainable urban governance. In keeping with the urban sustainability governance, I then critiqued the informal-formal dichotomy for rationalising the urban trajectory in sustainable cities debates, finally raising questions on how intersections of sustainable city and a city without slums overlooks the politics of justice. In this section I will introduce a theoretical debate that consolidates these three moments – in a constructed intersection between my three ideas of informality, sustainable cities and environmental justice. As I already mentioned, this thesis is indebted to Southern theory. I am choosing southern theory because I want to theorize from southern cities, particularly from the City of Tshwane. Hence, in this concluding section of the chapter, I interrogate this three-pronged nexus of informality, sustainable cities and environmental justice – from a specific theoretical point of view that had been built by southern theory and Urban Political Ecology (UPE). The idea is to build a theoretical framework on which to understand the ongoing questions of production of space in the contemporary global South urban studies. Thus, I suggest that the nexus is a helpful tool for us to theorize from southern cities, particularly from Tshwane, where informality, sustainable cities and environmental justice have intersected.

I will, therefore, start with reflections of the relevance of the UPE to my study. The UPE is helpful in illuminating how arguments on the production of nature have been reformulated and expanded in an attempt to let ecological processes re-enter our perspective on nature and the city (Swyngedouw, 2009). Considering that the UPE encourages us to focus on uneven processes inherent in the production of urban environments, but also seeks to understand and encourage the production of more just urban environments (Lawhon et al., 2014), UPE tends to overlook the situated understandings of the environment, knowledge and power that form the core of other political ecological understandings as well as recent work in Southern urbanism, as pointed out by Lawhon et al. (2014). Thus, I am going to use ‘situated UPE’ (Lawhon et al., 2014), not only because it is the theoretical framework that is relevant for issues of environmental justice in the cities of the South. But because I want to situate my work in Tshwane and to go further to theorise from Tshwane – and that is what situated southern theory teaches me. Furthermore, provincialization of the north centred UPE might illuminate some of the central concerns for southern urban research. This resonates with Lawhon’s (2010) argument that by situating UPE we might learn anew from trying to explain cases that do not look like established northern theory

It is then fitting to draw this section to a conclusion with focus on articulating the concepts of informality, sustainability and environmental justice as components of the nexus. From the situated UPE, I seek to draw attention to parts of the UPE that might be beneficial to travel and how this might enable new insights on formalization. Thus, it is my hope that the nexus can contribute to the ‘unbundling in the global north’ (Lawhon, 2020), so that I can take it Tshwane.

2.5.1 The Urban Political Ecology

Considering that issues of sustainability, the production of urban spaces, governance and justice are addressed by Urban Political Ecology (UPE), I argue that the notion of UPE offers an opportunity to locate the theoretical argument about formalization and its implications in production of environments in spaces of informality. The foundations of UPE scholarship, are based on the insistence that urban environments are drenched in uneven power relations. Not only that, but the material production of environments is necessarily impregnated by the mobilisation of particular discourses and understandings about nature and the environment (Heynen, 2014; Swyngedouw & Heynen, 2003). These claims are followed by arguments urging us to pay particular attention on the political economic processes that bring about injustice, not the natural artefacts that are produced through these uneven social processes.

The UPE is a field of study that emerged in the late 1990s, as an offshoot of political ecology (Angelo & Wachsmuth, 2015). The emergence of UPE was with the aim to trouble political ecology, which itself continued to stubbornly exclude the city from its analysis (Angelo & Wachsmuth, 2014). Thus, UPE brings the ecological processes back to the production of nature (Swyngedouw, 2009). UPE, more specifically, examines power relations in processes of environmental production. Its emergence was instigated by (Swyngedouw, 1996), who was amongst the early cohort of UPE scholars that began prodding political ecology (PE) in the direction towards introducing the urban into the PE. Swyngedouw's conception the UPE as a "*ferment from which a new and richer urban ecology or urban political-ecology may germinate*" (p:3), was pointing to a paradigm shift towards alternative understandings of the urbanization of nature. This development is well captured in the claim of Angelo & Wachsmuth (2014) that the foundations of urban political ecology are centred around two related goals: to bring the methodology of political ecology into urban settings to which it had hitherto not been applied, and to retheorize urbanization itself as a process of socio-natural and not only social transformation (page). Building on this scholarly works has been a moving objective. As pointed out by Angelo & Wachsmuth (2014), further conceptualisations from other founding scholars of the UPE such as Matthew Gandy's (2003) *Concrete and Clay* and Maria Kaika's (2005) *City of Flows* have brought a 'solid body of UPE theory' (Keil, 2003), in the process they helped bring to critical urban studies a new vision of the traditionally understood city (Angelo & Wachsmuth, 2014).

The UPE provides critical insights into the socio-environmental production of spaces. In particular, Keil's (2003) re-conceptualization of the UPE as "the realization that what we call 'the urban' is a complex, multiscale and multidimensional process where the general and specific aspects of the human condition meet" (P:725), opens up a new understanding on some of the issues central to UPE. First, the preoccupation of the UPE with power struggles in the production of spaces are abound. In the exploration of such entanglements the UPE places particular attention on a series of urban and environmental processes that negatively affect some social groups while benefiting others (Swyngedouw & Heynen, 2003). Positioning urban environmental conditions as dynamic, socio-physical, power-laden and co-evolutionary constructions (Swyngedouw, 2009: 603), has in essence been the UPE's show of power operates.

The UPE's understanding of power has been captured through various arguments. Reinforcing this debate on the production of unjust urban environments, Lawhon et al. (2013), draws to postcolonial and feminist arguments and debates. They, for instance, argue that social relations of class, gender and race inform the process of urbanization and come to codify unjust urban geographies – producing healthy environments for some, while others live close to hazards and with less access to resources. Other scholars have raised those power debates through environmental justice arguments, by reminding us how *“Uneven consequences of socio-environmental change, the distribution of environmental ‘goods’ and ‘bads’, and the rhizomatic networks that relate local urban ecological transformations with distant socio-ecological processes are now commonly understood as combined social and physical entanglements”* (Swyngedouw, 2009: 603)

These various analyses mobilized to account for these processes reflect the Marxist nature of UPE. Common to Marxian urban political ecology scholars' explanation of how power operates, is the examining processes of capital accumulation as the logic behind these processes (Swyngedouw & Heynen, 2003; Gabriel, 2014; Lawhon et al., 2014; Rattu & Véron, 2016). To examine how power operates, exposes ideology and critiques the structure of society, Marxist UPE scholarship turns to processes through which power redirects material flows, including metabolism and circulation (Swyngedouw, 2006; Lawhon et al., 2014). In consequence, the infrastructure of the city is central to understanding the political ecology of urbanization (Lawhon et al., 2014). The UPE's critique of processes of environmental production has merit for analysing the uneven environments in informal spaces.

Through an analysis of the historical-material notion of power, Marxist UPE explicitly recognizes that the material conditions that compromise the urban environments are controlled and manipulated and serve the interests of the elite at the expense of the marginalized populations (Swyngedouw & Heynen, 2003; Swyngedouw, 2006; Lawhon et al., 2014). In turn, UPE provides an integrated and relational approach that helps untangle the intersected, economic, political, social and ecological processes that together form highly uneven and deeply unjust landscapes (Swyngedouw & Heynen, 2003, Heynen, 2014). In essence, calls for us to pay attention to capitalist⁵⁹ governance processes that bring about 'uneven urban environments' (Swyngedouw & Heynen, 2003; Angelo & Wachsmuth, 2014; Heynen, 2014; Tzaninis et al., 2020), give UPE scholar--s grounding to challenge the myth of inclusive governance processes.

In sum, we should understand the aim of Marxist UPE as seeking to craft spaces for another way of thinking about production of space. Various scholars, including Lawhon et al. (2014) have reiterated how UPE sought to create an understanding and encourage the production of more just urban environments. However, as I will show below, the contention of many, including southern scholars, has been based on the limits of the UPE's framing of the notion power drawing from its Marxist perspective. For some, including Ahlborg & Nightingale (2018) the issue is with the shape of power

⁵⁹ Capitalist in this sense is not only limited to capital as an economic concept, it follows idea of capital in Bourdieu's sense [see chapter 7]

There are different and sometimes conflicting conceptualizations of power in this field that portray power alternatively as a resource, personal attribute or relation. While my positions resonate with these views, especially given the informality and poor environments, there are crucial gaps in UPE writings on power. For me, what is needed is to ask the question of where the power in processes related to resource governance emerges. In other words, where is this power located and how do we identify it? Especially if I follow on Swyngedouw's (2009) notion of postpolitical condition⁶⁰, which argues for the avowal of politics from processes of production of space.

⁶⁰ Swyngedouw (2009) raises the notion of 'postpolitical condition' within the UPE scholarship to deconstruct the rationality of governance interventions.

2.5.2 UPE and the rationalities of urban governance

The focus of UPE studies on the processes that produce uneven and deeply unjust landscapes (Swyngedouw & Heynen, 2003) demonstrates that we cannot speak of the power struggles in the processes of space production without reflecting on the political processes underpinning those power struggles. This is especially true if we consider Swyngedouw's (2009) critique of scholarship, including UPE, that locates power in political processes leading to the production of uneven spaces, yet fails to account for the politics of those power relations. UPE draws its understanding of space on Foucault and Lefebvre's articulation of space as being fundamental in the exercising of power. From Foucault, UPE draws its understating of the omnipresence of power in the production of space. Recent reminders from Calbérac (2021), for instance, highlight how Foucault's work postulates space as a site of power dynamics. From Lefebvre, UPE draws its understanding of how power is spatialised, through his conception of spaces as social constructs. Drawing from Gramsci's (1999) notion of hegemony, Lefebvre argues that: social space is a social product and the space this produces also serves as a tool of thought and of action. In addition to being a means of production, this created space is also a means of control and, thus, of power domination (1991:26).

While these two different articulations of power and production suggest that we pay attention to the rationalities of governance processes, they nonetheless fall short of informing us that power has different manifestations. Because, as suggested by Ahlborg & Nightingale (2018), one of the areas where power rests is in knowledges and ontologies shaping resource governance processes. They argue that a critical part of how dominant actors shape resource governance projects is based on different knowledges and certain logics around what is true and desired. UPE studies share similar understandings on the governance of space. For instance, Swyngedouw & Heynen, 2003, link the power to the governance of space by highlighting the dynamics from the nexus of power and the social actors carrying it, who ultimately decide who will have access to or control over resources and who will be excluded from access to or control over these same resources or other components of the environment.

With this in mind, I concur with Rattu & Véron's (2016) insistence that the focus of UPE should not necessarily be on the processes leading to uneven environments, rather on the power regimes that sustain specific environmental arrangements and the discourses over them. Theorizing the production of space in this way raises questions about how governance practices enable the exercising of power, by drawing us towards understandings of how space serves as a rationality of government, in particular, the strategies and tactics of power that seek to use space for particular ends (Foucault, 1980).

To untangle the complexities of the governance of space and power, I look towards Foucault's work on governmentality, which debates that managing power 'requires a theoretical grounding that takes into account both macro and micro technologies of power' (Lawhon et al., 2014). Meaning that governmentality brings to light the numerous modes of exercising power. As a key notion in Foucault's work, governmentality can be understood as complex of calculations, programmes, policies, strategies,

reflections, and tactics that shape the conduct of individuals (Foucault, 1991). Furthermore, governmentality is “referring to the rationalities and mentalities of governance and the range of tactics and strategies that produces social order” (Merry, 2001: 18). Foucault’s governmentality brought new insights on other objects of exercising power, by shifting attention from seeing power only through ideas of domination and repression. Rather, Foucault’s governmentality advances insights on social control beyond its general framing as a tool for ordering and confining bodies and structure of surveillance. Instead, governmentality can also be understood to function as manipulation of processes of power.

The production of space and subject formation are the two central aspects of governance⁶¹ on the logic of governmentality. The production of space serves as a material control that makes a particular way of being comprehensible. I, therefore, concur with Diçek (2007) that governmentality has assumed a different function. It shifted from its repressive outlook on distribution - of places, peoples, names, functions, authorities and activities – towards a normalization of this distribution. As we will see, in Tshwane, normalizing the idea of permanency, has preoccupied the logic of formalization. To govern spaces in a particular way, governmentality leverages on the management of others (Alhborg & Nightingale, 2018). This mentality is evident in Rose, O’Malley & Valverde’s (2006: page) conceptualisation of governmentality as techniques and procedures for directing human behaviour. In her contribution to these readings, Lloro-Bidart (2017) shows how the state and other actors leverage on specific techniques, interventions and discourses as a means to exercise dominance, mainly at a micro-level.

Thus, to spatialize its dominance, governmentality leverages on the production of subject formation, as a technology of power (Foucault, 1977). As with technologies of power, subjectification, lends itself as a conduit for exercising different forms of governmentality. Meaning that, urban governance thrives on the production of subjects. I follow on Huxley’s (2006) reading on the different spatial rationalities employed by those in power, to problematise urban spaces and justify the production of particular subjectivity. Here Huxley, seen through table 2. 4, seems to suggest that spatial rationalities are laden with ideology, as she argues that they reveal “spatial and environmental 'truths' in the government of individuals and populations” (Huxley, 2006, p. 771). Drawing parallels with Huxley, I argue that these rationalities offer an analytic tool towards understanding the construction of logics of subaltern subjects in both the apartheid and the democratic regimes.

⁶¹ Governance here refers to the “execution of control not laws but through the disposition of things” (ref).

Rationality	Problem	Solution		
dispositional	“Draw on the logics of disciplinary and police power and seek to expunge the evils of chaos and moral disorder” (Huxely, 2006: 784).	“It operates with the logics of grids of classification for the spatial disposition of 'men and things', to bring arrangement and visibility to bear on individuals and populations problematized as chaotic and uncontrolled” (Huxely, 2006: 774).	<table border="1"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Apartheid rationale of the informal dweller</td> </tr> </table>	Apartheid rationale of the informal dweller
Apartheid rationale of the informal dweller				
generative	“Mobilizes medico-biological conceptions of the environmental generation of disease and moral decay” (Huxely, 2006: 777).	“Generative solutions to problems of government, involve the creation of sanitary, hygienic environments in which order and arrangement play a part” (Huxley, 2006: 784).	<table border="1"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Apartheid rationale of the informal dweller</td> </tr> </table>	Apartheid rationale of the informal dweller
Apartheid rationale of the informal dweller				
vitalist	“The problem of government identified by vitalist spatial rationalities is that of the creative evolution of humanity” (Huxely, 2006: 782).	“Vitalist spatial rationalities aimed not so much at restoring a lost state of order or a desirable equilibrium of health, but at giving progressive direction to dynamic, open-ended, bio-social, intellectual spiritual evolutionary processes” (Huxely, 2006: 782).	<table border="1"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Post democracy rationale of Permanent spaces</td> </tr> </table>	Post democracy rationale of Permanent spaces
Post democracy rationale of Permanent spaces				
<p>Table 2.4: Spatial rationales Data Adapted from Huxley (2006)</p>				

In sum, governmentality is about exercising specific spatial rationales to exert its power using artificially constructed subjects (Rattu & Véron, 2016) as its technologies of power. This revivates the argument that many forms of governmentality have a spatial component (R. W. Perry, 2000). For instance, the idea of spatial governmentality (Merry, 2001; Robins, 2002), defined as new mechanisms of social ordering based on spatial regulation, brought understanding on how urban social orders are increasingly based on the governance of space rather than on the disciplining of offenders or punishments of offences (Merry, 2001). Hence there have been numerous views linking spatial governmentality to neoliberal forms of state (Lemke, 2001). For instance, spatial governmentality is associated with diminishing the scope of collective responsibility for producing social order, a characteristic of governance in the modern state (Merry, 2001). This understanding is useful in explaining why local governments – including the City of Tshwane - have been more prone to adapt governmental practices for ‘governing at a distance’ (1998). For instance, the adoption of formalization process-a form of a ‘self-help’ approach to housing tenure, exemplifies this approach.

This again illuminates the argument by various scholars, including Gabriel (2014), which position subject formation as key to advancing the neoliberal forms of governance. This means that neoliberal modes of governance in particular thrive on autonomous subjects. As elaborated by Rose (1996, p. 59 in Besley) “in neo-liberal regimes individuals become ‘experts of themselves’, adopting ‘an educated and knowledgeable relation of self-care in respect of their bodies, their minds, their forms of conduct and that of the members of their own families’” (p:59). Such ‘liberal rationale’ (Huxley, 2006) exploits subject characteristics such as rationality and self-control as the neoliberal technologies of power par excellence (Rattu & Véron, 2016) to control subject behaviour encouraging them to make certain desirable life choices.

Subjectification can be understood as a neoliberal technology of power through neoliberal governmentality’ (Lemke, 2001; Hamann, 2009; Fletcher, 2010; Rattu & Véron, 2016; Ahlborg & Nightingale, 2018). Neoliberal governmentality can be framed as “the strategic creation of social conditions that encourage and necessitate the production a historically specific form of subjectivity” Hamann’s (2009:37). What is evident is that neoliberal governmentality operates through the manipulation of the environment in ways that shape Hamann’s (2009) understanding of neoliberal governmentality (“the conduct of conduct”) as “the strategic creation of social conditions that encourage and necessitate the production a historically specific form of subjectivity” (p:37). This form of subjectification which Dean (1994) refers to as governmental self-formation [see below], forms the basis of neoliberal governmentality, which seeks to create social conditions that encourage and necessitate the production of a self-interested rational actors (Hamann, 2009: 37). This subjectification also brings environmental governance into the debate. For example, Fletcher (2010) & Brand (2007) reconcile neoliberal governmentality as a governmentality which will act on the environment and systematically modify its variables, meaning that it is an environmental type of intervention (Fletcher, 2010; Ahlborg & Nightingale, 2018). Drawing parallels from neoliberal governmentality, Rattu & Véron’s (2016) readings of neoliberal environmental governmentality⁶² capture this form of governmentality that thrives on the objectivation of the environment (Brand, 2007). In Brand’s view, neoliberal urban governance seeks to re-politicize the environment through the constitution of an environmental subjectivity of self-governing individuals (Brand, 2007). This argument from Brand urges us to interrogate the role of subjects in the ‘environmental imaginaries’ (Grove, 2009), including sustainable cities and formalization.

We can enrich this part of the UPE that uses Foucault’s view, by using Chatterjee’s (2004) articulation of governmentality with the imperative of colonialism, and spatializing governmentality. Chatterjee is one of the scholars who took governmentality to postcolonial geographies, thinking with and from Indian cities. In his seminal book *The Politics of the Governed*, Chatterjee (2004) argued for the extension of Foucault’ concept of governmentality to post-colonial settings. The main idea here was to describe the state-society dynamics in the post-colonial world. Chatterjee argues that certain relations between governments and populations are conditioned by the functions and activities of modern governmental systems.

⁶² Rattu & Véron’s draws on Foucault’s of analysis governmentality to interpret ‘neoliberal environmental governmentality’, or “*environmentality*,” which they interpret as a space of technologies of self and power and creation of new subjects concerned about the environment.

Chatterjee centres this argument around the distinctions between concepts of civil society and political society. Through the notion of political society – which he frames as the population produced by governmentality – Chatterjee brings our attention to the operations of new technologies of power that claim to ensure that the benefits of development are spread. Chatterjee’s interpretation of governmentality reflects further points on Dean’s (1994) pursuit of understanding ‘political subjectification’⁶³. The main point here is that, in practice, governance rests in population categories, meaning that in the realm of practice, citizens are replaced with ‘populations’ in order to direct social welfare and social control projects (A. Robinson, 2008). Chatterjee’s argument is invigorated by Ahlborg & Nightingale’s (2018) reminder that governmentality functions by taking the population as its object. The local municipalities, may for instance, exert policy tools that claim to provide for the well-being of this target population, such as providing sanitation services for the informal dwellers, with the expectations that slum-dwellers would not dirty the streets or parks. The informal settlement dwellers are an example of the ‘target population’ (A. Schneider & Ingram, 1993) in the framing of a political society. Thus, Chatterjee’s enrichment of neoliberal governmentality applied to UPE, offers an opportunity to look at the processes of spatial politics affecting the poor post-colonial cities. This means it can help explain how, in the City of Tshwane, the informal dweller is recuperated as a resource to rationalize the provision of tenure through formalization.

To sum up, this section discussed governance practices that fall under the UPE’s purview, with specific concern on the hegemony of urban governance processes and the production of space. I also interpreted UPE through governmentality as UPE seems to neglect the fact that power can be exercised in various modes. Because theorizing governance practices is central to the contemporary UPE literature (Tzannis et al. 2020), locating the debates about formalization processes in a UPE governmentality lens is important for my urban governance argument, as it has intriguing implications for our understanding of the rationalities informing urban governance processes.

In an attempt to demonstrate that ‘power can be elusive’ (Ahlborg & Nightingale, 2018), I showed the theoretical shifts from governmentality to spatial governmentality, to neoliberal governmentality and finally neoliberal environmental governmentality. What has also emerged is that both the environment and space are rationalities of governmentality (Huxley, 2006). Thus, what is needed is that we reconsider our strategy for looking at power. One of the ways to do this is by considering the convergence of

⁶³ Dean (1994) usefully distinguishes three ways in which governmentality can be understood: “as ‘political subjectification’; as ‘governmental self-formation’; and as ‘ethical self-formation’”. ‘Political subjectification’ involves practices and discourses that see individuals as political subjects of various kinds, but particularly under regimes of liberal rule” (p:154–158).

“Governmental self-formation’ relates to the ways in which assorted agencies, authorities, organizations and groups seek to shape and incite the self-formation of the compartments, habits, capacities and desires of particular categories of individuals towards particular ends. And ‘ethical self-formation’ concerns the government of the self by the self ‘by means of which individuals seek to know, decipher, and act on themselves” (p: 156).

different logics of governmentality (Fletcher, 2010; Huxley, 2006). Similarly, Ahlborg & Nightingale (2018) view the notion of multiple governmentalities helpful for us to understand power as constitutive.

The Foucauldian perspective on governance can enrich UPE to also reflect on the nuanced rationalities of governance. It also illuminates how governance process uses subject formation as its 'technology of power' (Foucault, 1977). However, this governmentality enriched UPE relies on neoliberal explanations to critique the power dynamics and the processes of space production. The limitation of neoliberal explanations towards understanding cities of the global South are debated in the next section.

2.5.3 Southern theory, Theorizing from Tshwane a post-apartheid city

While the Foucauldian approach to UPE has been useful in shifting our understanding towards nuanced modes of exercising power, its explanations of the governmental rationalities remain embedded in neoliberal assumptions. As I already mentioned, this study is indebted to Southern theory. This emergent body of scholarly works that has been developing from the mid 2000s. Notable scholarly contributions that have enriched this field of research can be traced under rubrics such as *Southern theory* (Connell, 2007), *New geographies of urban theory* (Roy, 2009), *Theory from the South* (Comaroff & Comaroff, 2011), *Southern Urbanism* (Pieterse, 2013), and *Southern urban critique* (Lawhon & Truelove, 2020). Southern theory seeks to modify our view on how we approach cities located in the global South. The rise of southern theory was instigated by a contention between some southern scholars regarding the framing of southern cities in urban theory discourses. What southern theorists seek is for us to rework the process through which we engage with southern cities and how we write about them (Lawhon & Truelove, 2020). For instance, urbanization rates in southern cities outpace their northern counterparts (Lawhon, 2020). Moreover, cities in the South experience informality centred urbanization. While this is the case, the urbanization trends in the global South continue to be understood through a Northern lens. This has drawn criticism from southern scholars, including (Lawhon, 2020), who in turn urges us to desist from the wholesale deployment of Northern urban theories and tools in Southern cities. For McGee (1991), the contention with Northern theories is their narrow explanations of data collected in southern cities using EuroAmerican ideas.

A widespread example is that of conforming to neoliberal explanations. Lawhon (2020) engages the work of Parnell & Robinson (2012) to remind us that for too long, neoliberalism has been deployed as an ideological explanation to urban transformation in South Africa (Parnell & Robinson, 2012). For these authors, the contention with neoliberalism as a tool of analysis rests with the fact that its explanatory power is not universal and, at times, the concept insufficiently explains the causality of urban outcomes, in this way obscuring the inductive view of local context. For instance, the neoliberal explanation of the urbanization process puts forward an interpretation of urban transformations in economic terms. In this frame, the dominant explanation centres around the implications of the industrial revolution and the transition from primary to secondary industry (Vallance & Perkin, 2010). Here, urbanization is understood as being intertwined with a complex development that led to mass production and mass consumption defining an advancing economic setting (Skordoulis & Arvanitis, 2008). Proponents of an alternative view sought to problematize these narrow explanations with arguments that posit urbanization as more than an expression of global capitalist industrialization (Schindler, 2017; Brenner & Schmid, 2015). Rethinking the framing of urbanization in this way, I also argue, can unveil other aspects of urbanity that would otherwise remain obscured if global capitalism is the primary reference point (Schindler, 2017). For instance, it can unmute other social environmental aspects - such as the emergence of informality-centered urbanization, in ways that can illuminate the struggles to the right to the city for the poor. This implies that, when we speak about the urban structuring [such as informality in the city] we should be wary about this problem. Lawhon (2020) draws our attention to the works of various southern scholars, including Robinson (2013), to point out that we should stop being stuck in the understating of the urban as articulated by northern theories.

For instance, as I demonstrated above, there is a need to challenge the universal assumptions that informal spaces are not recognized as a part of the urban.

In the meantime, the literature on urban spatial logic remains rooted in Northern theories. As a result, informality centred spatial logics in Southern cities are marginalized for not fitting the modernity consensus of urban development. Some Southern scholars, including Lawhon (2020), have started talking back to this artificial division, by raising the debates urging us to stop this 'distinctiveness' discourse' and start incorporating cities of the south at the core of southern theory. The work of Schindler (2017) has, for instance, outlined this debate on how northern centred theories promote knowledge and ideas that posit cities of the south as inferior and as failures. However, such debates are not useful in refining urban theory, instead they fuel the argument that the south is different and therefore requires new theories (Slater, 1998). Voicing her equally rallies against this southern distinctiveness and its polarising implications, Robinson (2002) argues that southern cities -whether African, Asian or third world- share similarities with Northern cities, hence they should not be approached through separate theoretical constructs.

- Teleological approach to development

In trying to debunk the conventional idea, in urban studies, that posits Southern cities as an exception to theoretical expectations and norms (Lawhon et al., 2013), Southern theory has prompted a number of thought-provoking conceptual interventions. Theoretical insights and contributions from Robinson (J. Robinson, 2002), for instance, are significantly instrumental in the analysis of why Southern cities are undermined in urban theory. For starters, Robinson demonstrates that recasting our attention beyond, for example, the elements of the individual, nationalities, and race, can unveil how disciplinary differences determine the theoretical positionality of northern cities and southern cities in urban studies. This positionality designates cities of the south as objects of development theory, while northern cities are positioned as contributors to data through which to understand urban theory.

Nonetheless, binary contradiction continues to haunt southern theory to its core – at the level of postcolonial scholarship. As Lawhon et al. (2013) explains postcolonial scholarship enabled southern theory which seeks to reorient theory away from its basis in concepts of global North. The contention of postcolonial studies has, for long, been to dismantle this juxtaposing of southern cities with the Eurocentric conception of modernity. In this regard, postcolonial studies seek to deconstruct and politicise the ideas that northern cities are better and are a source of inspiration for the southern urban (Lawhon, 2020). Southern theory advances these concerns by urging those theorizing from the postcolonial position to raise concerns about the hegemony of explanatory theories that fail to account for diversity of local experiences, and particularly experiences and conditions of the global South. Here, the key point of intervention was about intercepting the universalism of north-centred ideas and knowledge with locale alternatives. Comaroff & Comaroff's (2011) call for *"ways of knowing-and-being that have the capacity to transform and inform theory in the north [sic], to subvert its universalism in order to rewrite them in a different, less provincial register"*(p:49), seems to suggest alternative theorizations. What this means is that we need a paradigm shift to release Southern epistemologies from these bonds of northern theories. Some suggestions have been made regarding approaches to the production of

knowledge, that may serve not only to situate knowledge, but also to counteract the usual undermining of Southern cities input in theory. In *Epistemologies of the South: Justice against Epistemicide* (de Sousa Santos, 2015) pursues the argument that Western political imaginaries present themselves as grasping the world in its totality, assuming no limits to what is known, or how, by the forms of knowledge prized by European modernity. For Santos, to challenge this hegemony will require counter hegemonic epistemologies. As suggested by Santos, this will imply deconstructing the 'Western epistemological paradigm' ('Northern epistemologies') and creating a radical reconstruction of what an emancipatory political epistemology is ('epistemologies of the South'). However, the challenge for counter-hegemonic knowledges is that they 'emerge in a variety of ways, some are firmly rooted in the tradition of the very discourses that they seek to overturn (Adelman, 2013). Recognizing this limitation postcolonial theorists, including Spivak (1999), have argued that scholars must interrogate the production both of their own worldview and the worldview that produces that data. Because, for example, research may take place in postcolonial city, but remain colonial in its outlook (Lawhon 2020). Meaning that we don't only need to question effects of the northern lens on southern cities, but that we also have to interrogate proposed theories coming from the south. Many studies on African cities, including my own research, are struggling to shake off these colonial influences. Having said that, I remain hopeful, as I share Robison's (2006) argument that urban theory can be developed from southern cities.

- limitations of the southern position to challenging the Anthropocene

While I am empathetic with these scholarly contributions, I seek to induct a different argumentative angle. My aim is to rather examine the processes that are particularly relevant when one looks at the cities of the south with their persisting informality, and the theoretical implications of those processes as they most often framed cities of the south using the teleological understanding of development. What this tells us is that, to transcend the north-south binaries will require focus not simply being on who or where of theory say, but on the assumptions embedded in them (Nagar, 2014). This suggests that studying cities through their intricate spatial logics we should question the rationalities and implications of deploying western theory inspired urban policies and practices to southern cities. Nevertheless, these critical theoretical contributions from the South are useful in challenging the foundations of neoliberal/Marxist perspectives underpinning the UPE. However, they fall short on moving postcolonial the debates towards a position of challenging the Anthropocene spatial logics.

In sum, the UPE has been particularly instrumental for exploring the politics around the production of space in southern cities and the complex governance that regulate them (Tzaninis et al., 2020). However, Critical Southern theory voices tell us that, the UPE tends to overlook the situated understandings of the environment, knowledge and power that form the core of other political ecological understandings as well as recent work in Southern urbanism (Lawhon et al., 2014). This limitation has, therefore, instigated my gravitation towards 'situated UPE' (Lawhon et al., 2014) as my theoretical framework or field of reference for this study. As I move to situated UPE it is important to also re-emphasise that, in the same way other southern scholars have iterated, my intention in evoking the southern theory is not a disguise used to abandon theories and ideas formulated in the North (Parnell & Robinson, 2012). Rather, I follow in the footsteps of those southern theory scholars, such as

Lawhon, who are concerned with how we can make use of northern and other urban geographical insights without obscuring the very real differences between cities globally. With this in mind, my discussion in this section will provide a brief overview of situated UPE.

2.5.4 Postulates of a situated UPE and their implications to southern theories

The southern theory critic of the UPE expedited the need to shift discourses on how we can approach cities of the South. Although this epistemic project towards a more heterogeneous UPE (Lawhon et al., 2013) had already permeated postcolonial studies by linking postcolonial thinking with UPE in South Asia (Lawhon et al., 2013; Zimmer, 2015), lingering questions from Southern theorists about the Marxist UPE's explanations of power have further expedited the provincialization of UPE. Lawhon et al.'s (2013) work on Situated UPE does exactly that. It draws on emerging notions such as that of 'African urbanism' to further reflect the heterogeneity of the global South. Meaning that situated UPE not only advances the postcolonial influence in UPE, but at the same time introduces a paradigm shift in the production of knowledge, one in *which Africa can be the subject and not just object of research* (Sanders, 1999).

Situated UPE is a new field of research which was introduced by Lawhon et al. (2013). It aims to reconcile the UPE and Southern theory, by challenging UPE's situated understanding of power, knowledge and the environments (Lawhon et al., 2013), as shown in figure 2.4. In other words, situated UPE reworks UPE through the southern theory lens, providing a valuable space to locate these shortcomings of the UPE regarding Southern contexts Lawhon et al. (2013). This might just be what we need to shift what Meyers (2003) sees as a long history on the study of southern cities, that has largely been seen sitting on the margins of urban studies (Lawhon, 2020). This shift resonates with the call for situated UPE scholarship, which according to Tzaninis et al. (2020) mobilizes a Global South perspective as a tool for conceptual and empirical reorientation. As demonstrated in Figure 2. 3, situated UPE promises to create the possibility of a broader range of urban experiences to inform theory on how urban environments are shaped, politicized and contested (Lawhon et al., 2013). For instance, situated UPE has done a lot of dislocating of the UPE, unbundling of northern theoretical lens so that we can theorize about everyday situations in the global south.

Lawhon et al. (2013) urges us to understand situated UPE as an outcome of the 'provincializing' of the UPE. They draw the concept of 'provincializing' from Chakrabarty (2009). Therefore, provincialize UPE, as contended by Lawhon et al., takes context into account and opens up space by paying attention to ideas that are taken for granted, in order to broaden the scope for theorizing with more urban experiences in mind. As Lawhon (2020) surmises, the term 'provincialize' means putting something in its place. The essence of provincialization is a metaphorical concept, which in the view of Sheppard et al. 2013 points towards efforts to decolonize mainstream knowledge claims, thus creating space from which to challenge urban theories that treat northern urbanization as the norm. Taking its cue from such perspectives, situated UPE ensures we can move towards an understanding of urbanism in different contexts. Such transformations, in the view of Lawhon et al. (2014), can help build a diversified urban political theory, that can translate experiences across the world without being dominated by North experiences in its effort to generalize. That entails taking Northern perspectives head on, to unbundle the asymmetric power relations that characterize the hegemony in knowledge production. While situated UPE seeks to challenge the dominant Northern discourses underpinning the UPE, it is nonetheless fails to self-position as a novel field of research. It neither necessarily

advocates for the discarding of Northern theory altogether, nor for rejecting European thought. Instead, we are reminded that idea of provincialization articulated by Chakrabarty (2009) is about recognizing that *“thought is related to place and that universalist notions of modernity such as justice, democracy and citizenship encounter pre-existing concepts, categories, institutions and practices [in place] through which they get translated and configured differently”*. In sum, situated UPE is about talking back to urban theory, to borrow from Comaroff & Comaroff (2011), that there is much to learn from the South, which can be of great relevance to the North. In the following subsection, I will move the debate towards interrogating the theoretical assumptions made that are relevant towards understanding formalization.

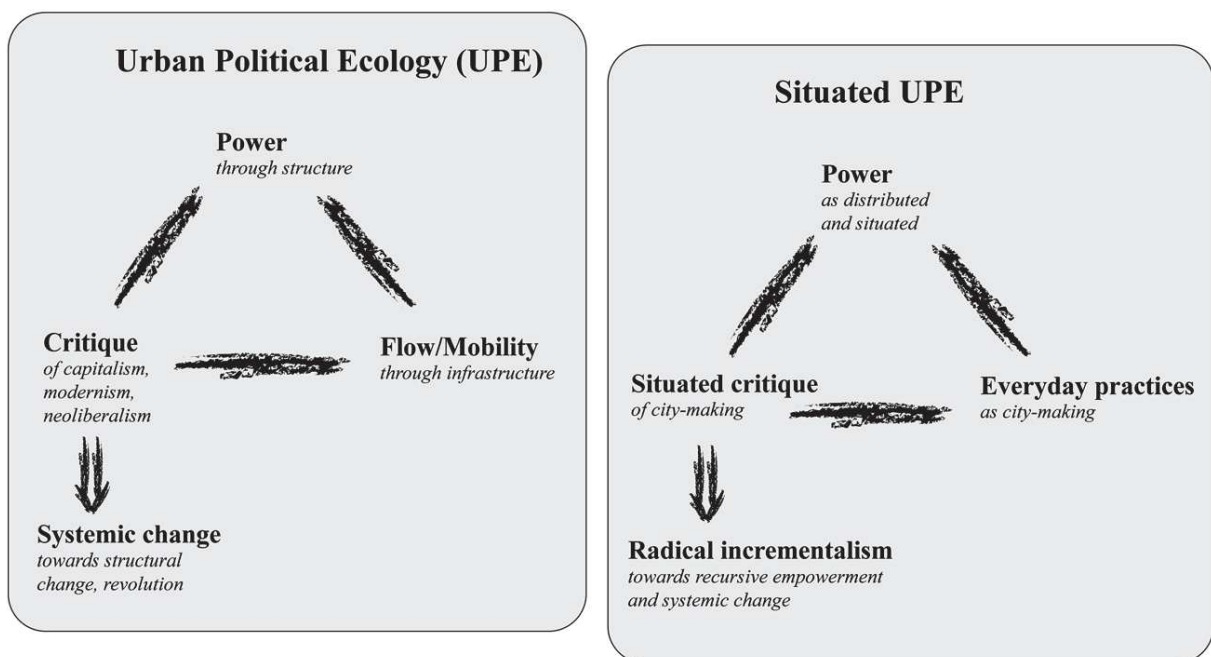


Figure 2.4: From UPE to a Situated UPE

Source: Lawhon et al. (2013)

As can be seen in figure 2.4, what Marxist UPE and situated UPE have in common is their critique of power, though from varying perspectives. What differentiates them is the paradigms from which they draw their criticism. As I have discussed above, UPE is Marxist, a position that situated UPE, inspired by postcolonial studies and southern theories, seeks to challenge. I showed above how situated UPE challenges the status quo, through provincialization. What this tells us is that, instead of trying to impose preconceived ideas of UPE into Southern contexts, we should adapt insights so that they become relevant to the situation we are interested in. As a result, similar to Lawhon et al., my intention is not to discard the UPE as such, rather, I am interested in reworking the UPE to be relevant to my study. This means there are some assumptions of the UPE I can use and some I am going to discard. As

Lawhon (2020) points out, UPE needs assistance in unbundling the components of theory so that it can be better suited to travel across environments. What emerges is not only a recalibrated UPE - where some of its beneficial components are provincialized or situated - but also an expansion of sites of scholarly inquiry enabling us to theorize about everyday situations in the global south.

Discussions on UPE above have shown general ways in which UPE develops its understanding of power. Mainly by linking the emergent unjust environments to the inequalities brought by capitalism. In turn, situated UPE calls for a differentiated outlook to power relations. As shown in figure 2. 3, for example, situated UPE propositions giving more attention to everyday practices (Loftus, 2012), conducting a more nuanced examination of power as diffused and relational (Lawhon, 2012; Lawhon et al., 2014). My intention is not to reproduce this debate. Rather, following in the footsteps of Lawhon et al. 2014), who have done a lot of preliminary theoretical work when proposing situating UPE, I also seek to transform UPE so that it can travel to Tshwane. Re-terrorizing the UPE means I need to select what works in the context of thinking about formalization in the City of Tshwane.

This taking process has, in the first instance, impelled me to consider a common critique advanced by UPE scholars on how power manipulates governance processes resulting in unequal cities. What we see here is that power is conceptualised as the social production of nature to meet the requirements of capitalism is understood as historical process of capital accumulation (Lawhon et al., 2014). Whilst the UPE critique of processes has value in interrogating governance processes such as formalization for the power relations, I resonate with Situated UPE scholars as they set out to challenge the UPE on this material as an expression of power (Lawhon et al., 2014). Authors have urged us to liberate our understanding from its limited confines, to view power as being created and operating primarily through the process of capital accumulation and class relations (Lawhon et al., 2014). To counter this situation, they propose everyday practices as a starting point of analyzing power, as this creates space to understand power to include discursive power and knowledge claims. This view also reformulates our understanding of power as relationally constructed and enacted. This reconceptualization of power that opens space for understanding and contesting power from various contexts (Lawhon et al., 2013), resonates with my objective of approaching formalization in Tshwane. Especially because the history of power in Tshwane is also different, meaning that the context of how power is exercised is different.

Without seeking to romanticize informality Lawhon et al. (2016) problematize the UPE's limitation of employing infrastructure as an object to analyse spaces in Southern cities. The authors remind us that while infrastructure is used as a lens in regions where modernist urbanization was strong — as in the global North — it may well serve as a useful entry point from which to theorize urban socio-ecologies. Such understandings of infrastructure need to be adapted to what infrastructure is in southern cities. Lawhon et al. (2016) draw from Graham & Marvin's (2001) idea of the 'modern infrastructure ideal' to advance their argument for a more situated conception of infrastructure. Here, seeking to trouble the formal conception of infrastructure, they provide a critical response to the idealization of universal, uniform infrastructure by urban theories of the Global North, particularly given that in Southern cities

there is 'growing recognition of the limited possibilities for achieving universal, uniform networked access to services' (Lawhon et al., 2018). This observation calls for recalibrating the project of UPE to embrace new urban forms and processes of extended urbanization that we have witnessed since the last quarter of the 20th century (Tzaninis et al., 2021).

From the UPE perspective we can take that infrastructure is not only important, it also has a material dimension, and it is one of the ways to exert power. The fact that UPE scholarship writes in relation to the Northern modes of understanding infrastructure seems to neglect the fact that materiality changes – the material contexts in which this infrastructure is deployed are different. By contrast Simone (2004), mobilizes the idea of people as infrastructure to highlight that, in cities of the South, there can be a different way of thinking about infrastructure that needs to be taken onto account. Here, the definition of infrastructure moves a bit, it does not change radically. Simone's suggestion that we should consider people as infrastructure offers an opportunity for formalization to rethink its conception of spaces, which in the end can address the misframing [ibid] that led to the misrecognition of identity in the first place

Therefore, there is particular merit in the Situated UPE's call to: *'start with everyday practices as an object of understanding new ways of how power is contested, that is not identical to that developed by Northern theory'* (Lawhon et al., 2014: 512). Echoing these sentiments Pieterse (2010) invites us to take note of the usefulness of everyday practices in providing a conceptual inversion. For Pieterse, with everyday practices, we can explore the city from the bottom-up, while building a theoretical understanding through the eyes of the majority of poor denizens who access land through appropriation Lawhon et al., (2014) builds on Pieterse's understanding to illustrate the UPE's contention with the question of access. Thus, casting the spotlight on the formal uniform grid as a standard to understanding access. This approach has usefulness in developing new conceptions of informality, as it allows us to cast a renewed light on contemporary (capitalist) societies, while suspending moral value judgment over their political ecological processes. An illustration of material infrastructure being different is how the City of Tshwane tends to be more spread than many cities in which UPE was developed, which creates a difficulty of building infrastructure when the city is so spread out. Thus, the materiality of infrastructure has different shapes, forms and challenges. The idea is not to hierarchise, nor to judge that the communal tap, for example, is worse than individual taps. Rather, it is precisely the relationship between infrastructure and specific, although variegated, spatial forms and which UPE calls on us to re-evaluate, and which situated UPE is well suited to address.

2.5.5 The nexus meets situated UPE

To draw my theoretical argument to a close, I will now look at urban informal environments in the City of Tshwane – reproduced and transformed through the process of formalization - considering the growing calls for more just socioecological living conditions in this era of global environmental governance. As already mentioned, UPE concerns itself with the implications of the unjust processes of space production, particularly the power dynamics underpinning them, and the uneven spatial geographies that ensue from those processes. In this thesis I, therefore, seek to make space for the production of knowledge that will challenge the hegemonic urban environmental imaginaries (Gabriel, 2014) and their universalised assumptions about the nature of the urban. This means that UPE can, for instance, be leveraged as a very useful theoretical lens for decoding ways in which spatial production processes such as formalization have been strategically evoked and normalized as an urban governance rationality in the production of spaces within the contemporary City of Tshwane.

- Limitations of UPE

The UPE's ideas on understanding the production of space, processes and implications have permeated works by southern scholars. For instance, situated UPE, draws its theoretical grounding from Southern theory and the UPE. However, as I discussed above, the situated UPE has brought to our attention the limitations of the UPE in its conception of power, knowledge and the environment (Lawhon et al. 2014), which remain firmly located in a Northern gaze. For instance, drawing from their critique of the Marxist UPE, situated UPE changes direction by provincializing the north-centered UPE debates and enriches the field with new research methods, theoretical framings and practices from the Global South, (Lawhon et al., 2014, 2016). Hence, the situated UPE scholarship seeks to unbundle asymmetric power relations in the processes relating to the production of space, by provincializing knowledge, power and the environment when approaching cities of the global South. I concur with Marxist UPE, considering that the question of informality, sustainable cities and environmental justice could be asked from a Marxist point of view. However, as I argued above, UPE relies on neoliberal explanations to critique the hegemonic governmental rationality of unjust governance processes. I, therefore, take my cue from southern scholars such as Lawhon et al. (2014) and Tzaninis et al. (2021) when I see value in the provincializing of UPE as a go to theoretical reference for thinking anew about urban transformation and environmental politics.

This is particularly helpful since I am interested in bringing three key notions to my research – of informality, sustainability and environmental justice - [see figure 2. 5] into a governance nexus. I use of the word nexus for wanting to explicate the intersections of sustainability, informality and environmental justice. I seek to trace how these notions can collectively create space to produce relevant knowledge, from which to respond to questions of environmental governance processes in the post-apartheid City of Tshwane, as they intersect with a spatial imaginary such as the sustainable city paradigm and formalization. This nexus is firmly located in environmental challenges that are prevalent in cities of the South, especially Tshwane.

- Enriching situated UPE

The nexus is particularly inspired by the situated UPE, which finds its theoretical grounding in southern theory. As I argued above, a limitation of southern theories is its inadequate ability to counter the discourses informing Anthropocene spatial logic. Instigated by observations, these limitations in southern scholarship, Tzaninis et al. (2020) highlight the need for more emphasis on de-centralizing, 'counter-hegemonic' processes. They argue, therefore, for UPE and other perspectives from the global South to embrace theories and practices of decolonization and indigenous political ecologies. Here, Tzaninis et al. call for more emphasis on de-centralizing, counter-hegemonic processes, by shifting our focus towards ecological knowledge produced by local actors. Borrowing from Schulz (2017), Tzaninis et al. conclude that undoing the coloniality of knowledge, being and power will thus be the major task that lies ahead for a decolonial-ecological critique in and of the Anthropocene'. What this tells us is that, situating northern approaches alone is not enough. In order to be able to theorize and analyse from African cities we also need to recalibrate our situated approaches. As I have previously mentioned, this thesis is indebted to southern theory, postcolonial and critical geography. Thus, the nexus seeks to enrich situated approaches from two perspectives - that of a critical geography scholarship and postcolonial studies, leveraging on their critique of how governance processes problematize policy issues, and the nature of the ensuing interventions.

Critical geography scholars - particularly 'post-political' (Swyngedouw, 2009; Blaser, 2019; Wilson & Swyngedouw, 2014) scholars, critique UPE and its other branches - including situated UPE - for particularly overlooking the "post-political modes of governing" (Wilson & Swyngedouw, 2014, p. 5), this raises questions about depoliticized environmental management - about depoliticized ways of staging of the environmental problems and modes of managing them (Swyngedouw, 2009; Swyngedouw & Kaika, 2012). The implications can be accounted for through the emerging 'postpolitical condition'⁶⁴ (Swyngedouw, 2009). This means that bringing the post-political debate can enrich situated UPE in ways that can help us unravel the politics of environmental management underlying governance processes. For instance, Myers (2008) points out that, while challenges and solutions of sustainable development are increasingly oriented towards the city, work in the global South is dominated by managerial, technocratic and generally apolitical approaches. Disregarding the fact that 'the challenge of urban sustainability is ultimately a political one' (Keil, 2003).

To expose the contractions of these postpolitics, I bring the subaltern identity into the environmental politics of sustainability and environmental justice, not as a subject of contested origins - as we have learned through subaltern urbanism in section 2.3 - but rather, in its capacity as the permanent dweller and a subject of the spatial rationale of formalization. In a similar manner to the approach of the postpolitical, southern urbanism's argument posits that we should be mindful of how postcolonial states problematize subaltern spaces and classes in governance discourses (Roy, 2011). Thus, enriching situated UPE with this postcolonial a subaltern urbanism perspective to subjectification brings UPE closer to Southern cities.

⁶⁴ *The ultimate sign of postpolitics in all Western countries,' Žižek (2002: 303) argues, 'is the growth of a managerial approach to government: government is reconceived as a managerial function, deprived of its proper political dimension' (Swyngedouw, 2009).*

As I locate my analysis of the process of formalization in the City of Tshwane, the nexus extends situated UPE into formalization through the idea of permanency⁶⁵, which became my approach to research on formalization in the City of Tshwane. Thus, the nexus should be understood as another approach of learning anew about formalization. As it has already been established, the implications of the unjust processes of space production are core to UPE studies and its branches, including situated UPE. Thinking of formalization, as an urban governance processes, seeking to address informal spaces with their unjust environmental condition, fits into the scope of UPE studies. Thus, standing on the nexus of informality, sustainability and environmental justice with its theoretical grounding on an enriched situated UPE, provides an opportunity to flag additional socio-spatial dynamics and governance practices that wittingly or unwittingly exceed UPE rationalizations. Thus, the working through the nexus segues our simplistic view of formalization as governmental practices in the production of urban environments. Rather it presents a situate tool of studying formalization based on permanency, in order to:

1. To question the environmental politics of formalization and the sustainable city paradigm

Looking at process allows us to understand the profound and rapid changes that have been happening in South Africa since 1994, which in a way also reflect the swiftness of change in emerging countries. Based on my own observations in Tshwane, formalization as a process of production of spaces lends itself to the rationality of global environmental consensus and governance. For instance, the rise of formalization in urban governance discourses was a response to the global on environmental politics⁶⁶. As figure 2. 5 shows, formalization is responding to the environmental politics on climate, informed by a consensus between environmental justice and urban sustainability. Thus, the nexus helps us to understand the postpolitical moment of environmental justice and sustainability through formalization.

As it has been established, urban sustainability is concerned with the implications of urban development on the environment, while environmental justice is concerned with the unjust urban development and its implications on the environment. While the place of informality is a key and common concern in this consensus, the sustainability paradigm and environmental justice (EJ) differ in their approaches towards problematizing informality in the sustainable urban development debates and practices. The sustainability paradigm, for instance, proposes a sustainable city as governance intervention into its conception of the urban environmental crisis. As I demonstrated above, in sustainable city thesis, informality is problematised as a hindrance and crisis to sustainability (You, 2007). In this case, the consensus is that which links informal spaces with environmental degradation. While EJ questions the unjust processes and procedures in urban development, it nonetheless fails to propose concrete urban governance interventions, as is the case with the sustainability paradigm. It could, therefore, be argued that the path of environmental justice towards *"sustainable development is more of a sermon about moral call"*(campbell, 1996:301).

⁶⁵ Further discussion in Chapters Six and Seven.

⁶⁶ Environmental politics is a politics legitimated by a scientific consensus which, in turn, translates into a political consensus (Swyngedouw, 2009: 602).

In consequence, the intervention into the environmental governance of informality is mainly framed from the perspective of sustainability. Section 2.4 argued that governance interventions such as Slum-Free cities, seek to enrol informal spaces as vehicles for stirring the environmental politics underpinning the spatial imaginaries of the sustainable city.

The nexus opens up new ways of thinking about the environmental politics. It allows me to ask questions about the politics of environmental justice and urban sustainability. It did so, by enabling me to position permanent spaces in relation to informal spaces, and to question the representation of permanent spaces, not only in relation to informal spaces [considering they are both spaces produced by state's processes], but also in relation to the formal spaces in the urban imaginary of the sustainable city paradigm. While sustainability discourse and environmental justice discourses on informality draw from different and opposing rationalities - the former rebuking informality as unsustainable environment and the latter worrying about the unjust environmental condition of informal spaces; bringing the two concepts together in a nexus with formalization brings new insight into how they equally recuperate informality as an object of response to the consensus

To dislocate the power as the enriched situated UPE has taught me, meant I had to find ways of challenging the Anthropocene nature of urban environmental imaginaries of the sustainable city paradigm. This has leads me to Lawhon et al.'s critical assertion, in which they note as a frequent overfocus on informal spaces in Southern cities. They argue that this overfocus primarily lacks sustainability and limits the possibilities for scholarly enquiry, as it obscures efforts to understand other modes through which environmental injustices are produced. The nexus opens up space to seeks such truths.

2. To ask questions about framing spatial rationalities in postcolonial spaces

Because spatial imaginaries work through subjectification, meaning the formation of a political subject, I am especially interested in making space for the voice of the permanent dweller [a political identity formed subject through formalization] and how these voices can provide insights on how to 'think anew' (Lawhon, 2020) about formalization as a process of space production, and spatial imaginary in the governance of subaltern spaces in a post-apartheid government. Formalization can be understood as a process of production of space and a governmentality. This means it has a particular way of approaching space, for instance, how it approaches informal spaces as an infrastructural problem.

UPE places "*examining infrastructure as a site of social and political struggle*" (Gabriel 2014:41) at the heart of its conception for power. To dislocate this approach, situated UPE proposed starting with everyday practices as a way to reflect other ways of how power is contested and exercised from different spaces, especially those that have been marginalised in dominant urban theories.

Thus, the nexus enables me to bring out the truths about the rationales of governance practices directed at subaltern spaces, in the post-apartheid City of Tshwane. Readings on governmentality have illuminated how spatial logics link forms of power to processes of subjectification through techniques

of domination, anchored in a certain regime of rationality (Lemke 2000). They have specifically illustrated, as Lisa Hoffmann (2014) has shown, how the responsabilization of subjects can happen by virtue of their fostered socially oriented attitude where, in the end, they 'voluntarily' agree to help solve social problems created by the governance processes.

My understanding of subject formation draws from that of Gabriel (2014), which shies away from applying negative effects of power wielded by those in authority. Instead, it works through subtle persuasion. Gabriel's example of the 'lawn people' captures this subtle persuasion of the subject. As I will elaborate in the analysis in Chapter Six, formalization, through permanency, has styled the permanent dweller identity as an epitome of local urban transformation. Thus, from the nexus, I am to interrogate how the spatial rationale of formalization works through the permanent dweller identity as its technology of power. Thus, understanding the production of space through permanency in the City of Tshwane serves to empirically illustrate the contradictions of seeking to address injustice under neoliberalist/Marxist governmentality.

3. To review environmental justice through permanency as the 'invited spaces' of framing environmental justice in post-apartheid governance]

I chose this approach first because it helps me to create political space from which to hear the voice of the subaltern, and to understand the political agency of the permanent dweller- a new form of political subjectivation of the post-apartheid urban governance rationale - in the politics environmental governance. In this way, I am able to approach formalization not just as a site to study environmental production, but also as a political space. To be sure, my approach seeks to position permanency as invited spaces (Miraftab & Wills, 2005) of environmental production. Paradoxically these invited spaces is that they subdue the voice of the informal dweller in debates on environmental production.

As I discussed above, the incorporation of the environment as an object of governmentality provides a new challenge for environmental politics (Brand, 2007). For example, the era of environmental consciousness, has seen the gravitation towards neoliberalizations of the environment (Rattu & Véron, 2016). Here, we see neoliberalized forms of environmental governance (Chasek, 2001; Logan & Wekerle, 2008) playing out, with the discursively constructed neoliberal rational actor.

The justice element of the nexus is useful in learning how formalization recuperates permanent spaces as representations of just environments. Thus, the nexus allows us to raise questions about the permanent spaces as a site of environmental justice. Thus, speaking from the context of the nexus, not only does it help us to rethink these depoliticized perspectives (Tzaninis et al., 2020), but it also provides means to raise questions about justice. Formalization pursues an infrastructural element of urban process (Gabriel, 2014), that places focus on the upgrading of housing and living conditions in existing slums and informal settlements as indispensable (Smets & van Lindert, 2016), particularly when considering its potential ability to right the injustices of the past (Adelman, 2013:29). This focus on housing infrastructure elevates the distributive element of justice, negating to address misrecognition of identities.

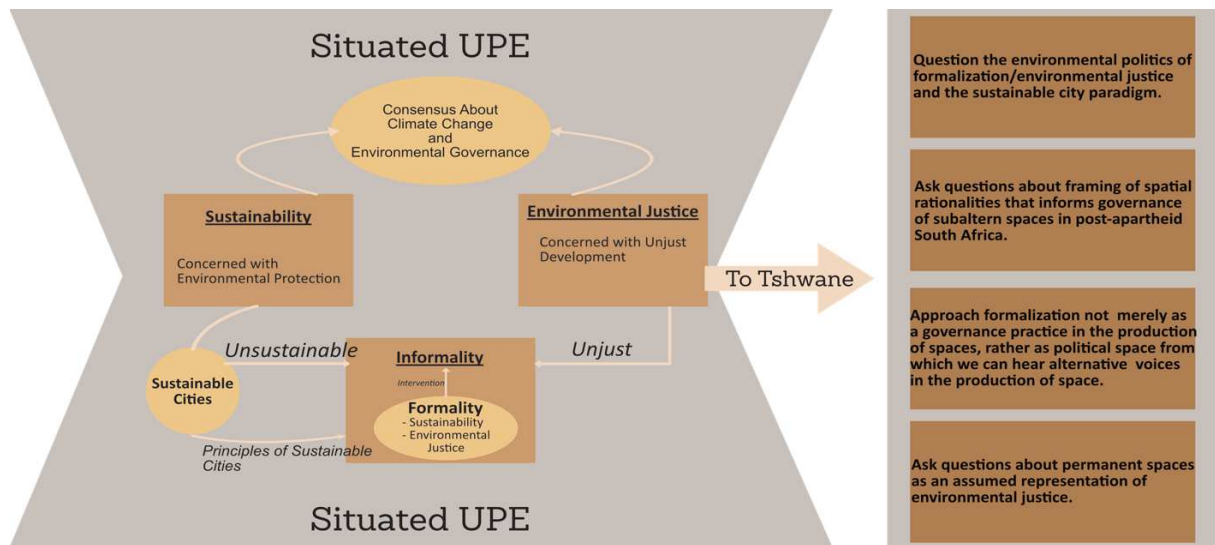


Figure 2.5: Overview of the Theoretical Framework

Source: Author (2021)

Illustration: B. Bendile (2021)

In sum, bringing these three domains – sustainability, environmental justice and informality – together allows me to critically engage with the unfolding rationality of formalization as it unfolds. This means that the nexus is also where the theoretical debate is reshaped and renews reformulated sets of questions that I will take to the City of Tshwane. In this way, the nexus enriches southern theory and allows us to talk back to urban theory about the production of environments from a firmer southern voice. I want to reiterate, however, that the nexus as a theoretical proposition neither seeks to devalue the place of situated UPE in understanding power and processes of production about southern cities, nor does it seek to be a recipe for postcolonial method. Instead, the nexus seeks to reinforce the theoretical grounding of the situated UPE, meaning it serves as an additional analytical tool for sharpening the southern gaze of situate UPE. My work, similar that of others before myself, also seeks to contribute to growing scholarly interest in cities of the global South and ongoing struggles over how to study them (Lawhon, 2020). There is still some way to go, hence the need for more theoretical contributions in postcolonial studies. But, as Lawhon et al. (2013) warns us, achieving the development of theory from the South is no small talk. Hence, while the nexus is heeding the call for a more nuanced understanding of global knowledge, it approaches the global south from that position of exact caution.

2.6 Conclusion

As I conclude, I can now surmise the relevance of my theoretical analysis for empirical investigation. It was my intention in this chapter to thrash out how power is rationalized and enacted, in processes of the production of space [in post democracy], in order to unlock these concepts for the later analysis on formalization in the City of Tshwane. As I said, my work is at the junction of the three domains of sustainability, informality, and environmental justice. The first section of the chapter provided an argument on how the concept of sustainability was instrumental in positing the global environmental governance of urban development. The objective was to lay a foundation for the critique on the contribution of sustainability to the Anthropocene spatial logics and imaginaries of the sustainable city paradigm. In this spatial logic, informality occupies a position framed by negative perceptions. While the rise of environmental justice promises to neutralize the ecological approach of urban sustainability, its environmental politics remain questionable. Bringing these three domains of informality, sustainability and environmental justice into a nexus – through which to think about processes of governance and production of space in Southern cities - has been a useful for postcolonial studies and Southern theories. The nexus is rooted in situated UPE, which not only challenges the power relations in governance processes and advocates for the production of just spaces, but also seeks to provincialize the Northern conceptions of power, knowledge and the environment held by those processes.

This chapter provided an outline of the nexus, platform from which I stand on in Tshwane as I questions [1] to question the environmental politics of formalization and the sustainable city paradigm [2] to ask questions about framing spatial rationalities in postcolonial spaces.[3]to review environmental justice through permanency the 'invited spaces' of framing environmental justice in post-apartheid governance. The nexus does not necessarily seek to rehearse the narrative on apartheid governance and its environmental politics. Instead, it challenges the environmental implications of the post-democratic arrangements, of spatial production processes, directed at 'righting the injustices' both inherited from apartheid regime and also in post-apartheid urban governance rationalities. Unravelling these contradictions and how to challenge them is what this thesis seeks to achieve. Having spoken of Southern and situating - the next chapter will outline the research methodology I need to collect the data that I will use to address these questions from Tshwane.

CHAPTER 3

Methodological Reflections for following Formalization and 'Just' Environmental Governance in Tshwane

3.1 Introduction

The previous chapter presented the research questions I aim to address in this study. Before I move to the empirical details of addressing those questions, I will first put my research into a broader methodological perspective. In brief, this chapter presents the methodological approach that guided my journey to gathering and treating the data to respond to the research questions at hand. Choosing a methodological suitability that will underpin the research process can be a 'research dilemma' as Mackenzie and Knipe (2006) said, particularly when conducting qualitative research.

My research is located between three intersecting areas - sustainability, environmental justice and informality - to explore the power struggles in the production of spaces. With that in mind, for this study, I needed a methodology of inquiry that would hold steady as I navigated the complexities rising from the discourse intersections in urban governance and politics. I concur with Burawoy (1998) that *"we desperately need methodology to keep us erect, while we navigate a terrain that moves and shifts even as we attempt to traverse it"* (p: 4).

In consequence, I have structured the chapter to outline not only the elements of my research strategy, but also to reflect my 'methodological position' (Haynes, 2017). The section of the chapter lays out the research plan by presenting the case study method as a methodological design adopted for this study. This presentation is sketched through the justification of the City of Tshwane as a case of study. In turn, I recognize the 'embedded case study' (R. K. Yin, 2009) as most suited to collect the type of empirical evidence required to answer the research question in a reasonable way. The ensuing section lays out the rationale for enlisting qualitative research as the methodological approach of inquiry. Here, I demonstrate the methodological dynamism of the 'embedded case study' (Yin, 2009) in the research process. This discussion elaborates the techniques used for data gathering and analysis as envisaged in the research design.

I round off the chapter with a glimpse of my reflection on the ethical considerations I encountered during the research process. This reflective account of the fieldwork also provides a preview into the methodological issues I encountered. Similar to Thummapol et al. (2019), I have come to understand that one can never anticipate all the possible challenges and issues prior to undertaking fieldwork. In view of this, leaning on reflexivity as a research tool created an opportunity to account for my role in the research process and indicated that our research methodologies are not only a technical tool accompanying us as we navigate the research field, but also a reflection of how we produce our There

is no doubt that international debates around city sustainability are well matured. Urban policymakers and planners worldwide are also at the forefront of adopting and adapting sustainable cities ideals (Ross & Leigh, 2000). In consequence, sustainable city types of policies and urban sustainability approaches have moored in global urban governance debates, especially in many of the cities of the global North, which are in general characterized by more sophisticated forms of urban developments. Added to that, ideas of urban sustainability have also diffused to the global South. The City of Tshwane, for one, has also bought into the 'alluring goal of urban sustainability' ((Vallance & Perkins, 2010). However, the City's pursuit of the status of a 'sustainable African city' can be interpreted as it conceding to the limitations of a sustainable city, possibly because Tshwane is besieged by perpetual informality [also see chapter 4]. Nonetheless, this phenomenon is not unique to the City of Tshwane. The Census report of 2011 (StatSA, 2012) presented a bleak picture on informality in major South African centres. At that time, Tshwane was experiencing one of the highest concentrations of informal settlements after the cities Johannesburg and Ekurhuleni. Having said that, Tshwane's battle with informality stands out because, as I will show in chapter 4, the sustainable city ideals underpin the City's urban development and governance goals.

I became somehow acquainted with Tshwane's urban governance dynamics during my master's research journey in 2016, which had a specific focus on the 'implications of planning policies on urban development in Tshwane' (Bendile, 2016). What was more interesting is that the City's own adoption and adaptation of the sustainable city ideals took place at the same as the emergence of the idea of formalization as a governance tool to transform the City's informal spaces into environmentally just spaces. My envisioning of Tshwane as a feasible case study was therefore influenced by: (1) Observations that although there have been some advances in trying to grapple with the role of environmental justice, there remains a dearth of scholarship that looks at how informal spaces remain marginalised in urban sustainability discourses. (2) There is a need for knowledge to advance theories on informality, sustainability and environmental justice from the global South. The status of the City of Tshwane, similar to most other capital centres around the world, makes it prominent in national, continental and international development debates. Despite this, there is little evidence of current monographs with a focus on environmental justice in the City's informal settlements.

Persuaded by the plethora of works appearing in literature that are critical of how the sustainable cities paradigm has become a marketing tactic with little impact on the socio environmental landscape. I was intrigued by how Tshwane, with its sustainable cities paradigms was faring. I set out to explore my PhD with a thesis titled "Space, inequality, and informality: Towards 'just' sustainability and governance for informal settlements in the City of Tshwane. The debate on how my research is influenced by southern theory has already been fleshed out in the previous chapter. Coburn argues that urban environmental justice research can benefit from a structural racism approach, which requires documenting the historical decisions, institutions, and policies that contribute to today's cumulative exposures. Thus, studying environmental justice in Tshwane, a city located in South Africa with its political brand of structural racism, required that I generate a nature of data that could adequately respond to the 'forces of structural racism' (Ross & Leigh, 2000). This data is located in both secondary and primary data sources. Secondary data encompasses pre-existing sources such as policies, strategy documents

and press releases. Policy document sources were targeted due to the City of Tshwane being located in South Africa where state policies have some consequences on the ground and are not totally ignored by everyone. Furthermore, the polity of South Africa as a democratic state enables media freedom with relatively satisfactory reporting on social issues. Given that the incidences of interest to the study I was investigating 'predated the start of the research' (Elger, 2012), I was able to rely on archived press releases to learn about certain important occurrences. The primary data, on the other hand, was located in fieldnotes, local stakeholders and in the field in specific sites – informal settlements to be precise. To generate this data, I used various techniques such as conducting structured interviews with local policy stakeholders [see figure 3.1]. I also conducted participant observations and environmental observations through photography. I share O'Hara & Higgins' (2017) view that photographs can provide information about the social context. Hence, images of the environment and spatial arrangements in the informal settlements became valuable contributions to the study.

Engaging with these data sources implied that I needed a research design that could be combined with this form of data. In this way, having situated my case in Tshwane shaped and informed my methodological choices. Thus, the next sub-section will explicate why I leaned towards the embedded case study as a preferred methodological design. I close off the section with a brief highlight of some of the key methodological concerns.

3.2.1 Embedded case study method

- Methodological design suitability

Finding a suitable research design is a complex exercise informed by various factors and considerations. For this study, and as is with other studies, the research objective was one of those considerations (Budiyanto et al., 2019). In most instances the choice of a particular research design, as noted by Yin (2009: page), is informed by the interest in forging a link between methods (data collection, analysis and interpretation) and research questions (conclusions)". This was also the case for this study, where I sought to set a comprehensive analysis framework from which to examine questions on the intersections of informality, environmental justice and 'just' governance. A case study design presented this opportunity in various ways. Firstly, case studies, in general, enable the researcher to capture in detail the context of a setting⁶⁷ (Leedy & Ormrod, 2013), hence their suitability for learning about little known or poorly understood situations (Leedy & Ormrod, 2013). Secondly, understanding complex settings requires complex empirical evidence, which in most instances lies in a variety of sources. As mentioned above, the data required to address the research question in relation to Tshwane's formalization is located in multiple primary and secondary sources [see figure 3.1], and various research sites. In consequence, the case study design proved useful as it enabled the generation of evidence from multiple sources (McDonnell et al., 2000; Yin, 2003; Baxter & Jack, 2007; Peck & Theodore 2012; Simons, 2012). This openness to diverse data sources is one of the strengths of case study methods, considering how utilizing multidata sources assists in bringing a richness of data together in an apex of understanding through 'triangulation' (Yan & Gray, 1994; Gillard et al., 2011;). In this way, 'the flexibility of the case study' (Yin, 2003; ref) as a multisource method 'contributes to the validity of the research' (Yin, 2003). Furthermore, a case study also presented me with an opportunity to develop an analytic framework (Patton, 2002), from which I could account for diverse interpretations emerging from settings within varying contexts.

- Why I opted for embedded case study method

A key attribute of a case study design is its utility as a tool for examining, in detail and over a duration of time, one or a handful of cases (Rakotsoane, 2012; Leedy & Ormrod, 2013; Neuman, 2014). Current studies engaged in the governance of urban informality, such as those by Kovacic et al. (2016) have reinforced the comparative case study as a fruitful mode of research. After all, different cases often emphasize complementary aspects of a phenomenon (Eisenhardt, 1991), which in turn contributes to 'increasing generalizability of study findings' (Jenkins et al., 2018). My aim with this study, was also to generate a rich analysis and interpretation that can be generalized to other settlements in the City of Tshwane and throughout South African cities. That being said, I had no intentions of undertaking a comparative case study approach. I was set on a single case - the City of Tshwane- as site from which to explore urban informality and its governance. I was particularly persuaded by Mariotto et al. (2014) who argued that single cases can enable the creation of more complicated theories than multiple cases, because single-case researchers can fit their theory exactly to the many details of a particular

⁶⁷ The context of setting: reflect physical, historical, economic and any social factors impacting the setting.

case. Nonetheless, I remained mindful, of the shortcomings of generalizing single case findings to other situations (Leedy & Ormrod, 2015).

This deficiency of the single case approach informed my decision to opt for an ‘embedded case study’ (Scholz & Tietje, 2002; Yin, 2003; ref; ref) Budiyanto et al., 2019). The hallmark of the embedded case study is that it proposes ‘multiple units of analysis’ (Yin, 2003: 47). An embedded design creates a ‘multisite’ (Jenkins et al., 2018; Groth et al., 2020) environment, where ‘subunits reside within the main unit’ (Yin, 2009). Figure 3. 1 gives a schematic illustration of the primary site and its subunits of analysis I identified in the case of Tshwane. Here, the informal settlement site was the primary unit from which I studied the City’s formalization process. Embedded in the main unit were various informal settlements that served as subunits of analysis, focussing on different aspects of the case (Scholz & Tietje, 2002). Thus, the embedded case study can help us mitigate the single case study’s narrow gaze towards the study phenomenon. This, in the end, can arguably add significant opportunities for an extensive analysis, enhancing theoretical insights (Yin,2003; Gondo et al., 2012; Budiyanto et al., 2019).

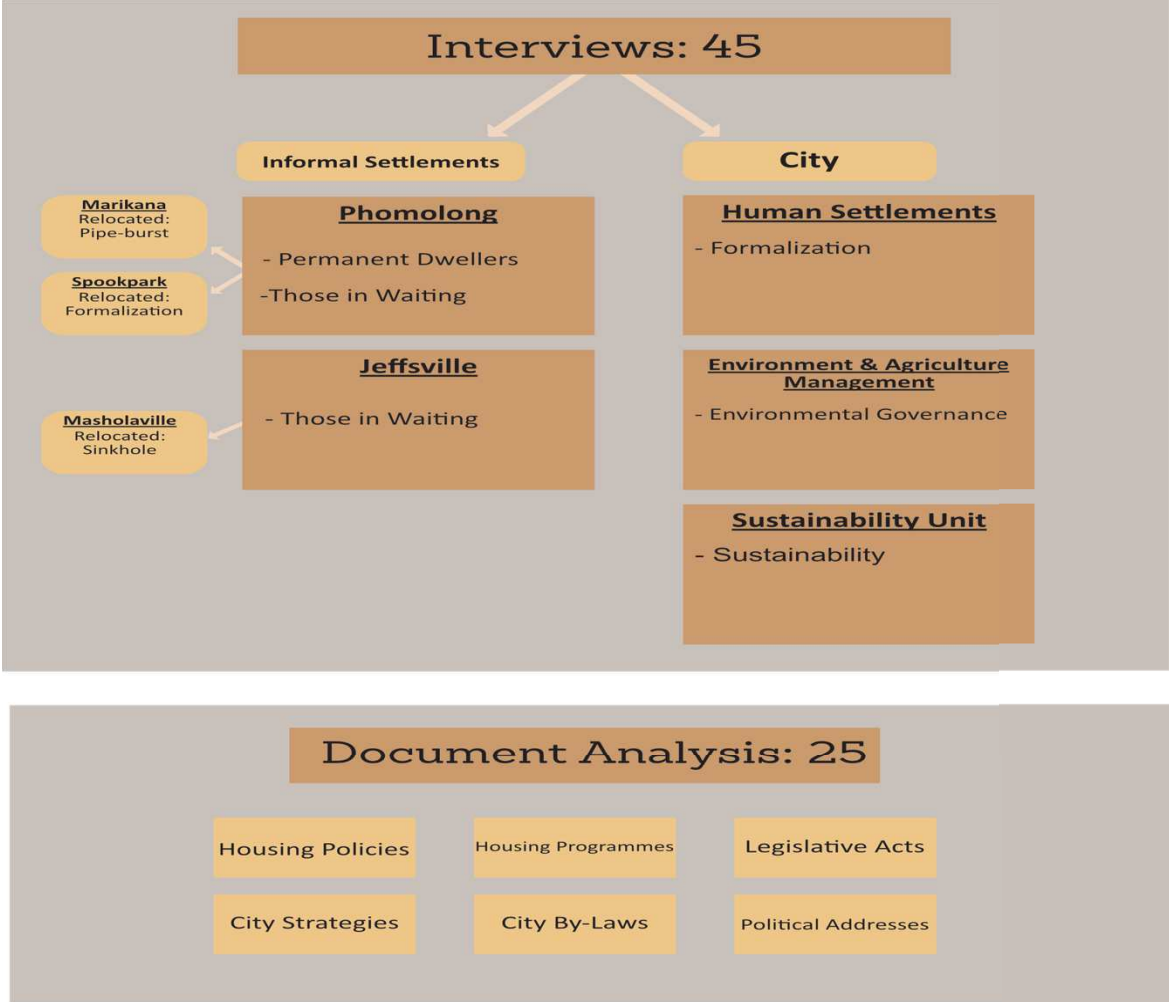


Figure 3.1: Embedded case and kinds of data
Design: Author (2021)
Illustration: B. Bendile

Having said that, I was also mindful of the importance of ‘binding’ (Baxter & Jack, 2008) my research field or case. The idea of binding the case is about delimiting its scope and feasibility factors such as the definition of the concepts, place of the phenomenon, period of the phenomenon and its context (Baxter & Jack, 2008; Gondo et al., 2012). In the case of Tshwane, the setting of boundaries was foremost informed by my main objective to respond to questions on issues of environmental justice and formalization (governance) in the post-apartheid City of Tshwane. I limited my scope to informal settlements that have faced environmental risks (figure 3.1 present context of those cases). Because I was particularly intrigued by informal settlements relocated as a result of those environmental risks, I also included those sites that have intersected with the city governance through formalization.

Taking these factors into account directed me to seeking a somewhat structured sampling strategy. Thus, I followed “purposive sampling” (Fletcher & Plakoyiannaki, 2012; Neuman, 2014; Thummapol et al., 2019; Groth, et al., 2020), as a suitable strategy of identifying information-rich informal settlements that would deepen my understanding of the phenomenon by acting as subunits of analysis (Neuman, 2014; Yu et al, 2014). To situate myself and my study, at the beginning of my PhD in 2017, I started reading media reports on environmental-related incidences in informal settlements, in the contemporary City of Tshwane. I sourced various local media houses, such as the Pretoria News and the Rekord, for coverage of potential environmental incidents. The media searches brought forth Phomolong in Mamelodi and Jeffsville in Atteridgeville [see figure 3.2 and 3.3], as two informal settlements that closely fit that criterion. The media reports on these two cases presented valuable context on the entanglements of sustainability and informality in the City of Tshwane. What further made these two sites fitting samples was the fact that both settlements were in one way or another intersecting with the formalization process in the City [see chapters 6 and 7].

Establishing boundaries in terms of the number of cases used became an issue of deliberation. I had initially not set out to restrict my research sites [the subunits of analysis]. What this meant was that my attitude regarding the number of cases [subunits of analysis] to sample remained open-minded during the media search exercise. However, in hindsight, reaching the saturation at two sub-units of analysis became an ideal situation. Baxter & Jack (2008) are of the view that case studies can also be a time-consuming exercise. Time constraints in research are also compounded by the constraints of having only one researcher involved in collecting the data (Yu et al, 2014). In my situation I was mainly faced with the time constraints associated with a doctoral study and the constraints of the co-tutelle, requiring six months stays in France. Furthermore, I also had three ‘intermediary units’ (Yin 2003), Spookpark, Masholeville and Marikana [further discussed in see chapter 6]- which can be considered extensions of Phomolong and Jeffsville. In the end, there is no wrong or right on the number of cases to use, as argued by Eisenhardt (1991), the appropriate number of cases depends upon how much is known and how much new information is likely to be learned from incremental cases. Thus, what is most important is selecting ‘information rich cases’ (Ebneyamini & Sadeghi Moghadam, 2018).

More than 700 households relocated

6 Sep 2012 STAFF REPORTER

TSHWANE has relocated more than 700 households in Phomolong informal settlement in an emergency move after two children drowned when a main waterpipe burst.

The settlement was built along water, electricity and road servitudes which pose a danger to residents. The pipe burst two weeks ago and caused the death of two children, loss of property and damage to several shacks illegally built on a water servitude in Phomolong Ext 6.

City officials, with the assistance of local contractors, had to work around the clock to relocate the families to a safer

and permanent area in Nellmapius Ext 6.

The city says it has provided water tankers, which are constantly refilled, and 66 chemical toilets. As a temporary measure, the city, in conjunction with Putco Bus Services, is providing transport for the children, from the new area to their schools.

The city says plans are at an advanced stage to have communal water taps installed.

"The city is also busy with the installation of high-mast streetlights and the development of designs for services. Public open spaces have been

demarcated and the municipality will develop a recreational park for children and each beneficiary will receive a fruit tree to plant in their yards."

A site as been identified for a primary school and early-childhood development centre.

Refuse bags are being provided and collected weekly as a temporary measure to keep the area clean.

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Figure 3.2: Pipe Burst Relocations
Source: Pretoria News (6 September 2012)

45 families to move after sinkhole scare

Disasters · Society

26 Jan 2017 GOITSEMANG TLHABYE goitsemang.tlhabye@inl.co.za

THE City of Tshwane has organised alternative accommodation for residents of Jeffsville informal settlement in Atteridgeville after a massive sinkhole developed in the area.

The residents reported hearing a loud bang on Tuesday around 10pm and walking out to find a huge hole extending towards their shacks at a rapid pace.

By yesterday afternoon, the sinkhole had grown bigger, moving towards other shacks in the informal settlement.

About 45 families were affected, and others were unable to remove their belongings in fear for their safety.

City spokesperson Selby Bokaba said they moved promptly to secure a safer place for the affected families, where they would be temporarily accommodated.



Tshwane is relocating families after a sinkhole appeared at the Jeffsville informal settlement in Atteridgeville.

“When we became aware of the situation, we immediately activated the important role players like the metro police, emergency services and disaster management to be deployed to the scene.”

Bokaba said the teams worked

overnight to help evacuate the distraught families.

The affected families were temporarily accommodated at Mlambo Hall in Atteridgeville.

Bokaba said the families were then relocated to a safer place in Bremer Street.

“The relocation will take place in various phases, starting with five families until all affected people have been moved.

“A team of social workers has also been dispatched to determine the social impact and trauma the affected families may be experiencing.

“A city contractor of the Department of Housing and Human Settlement had already volunteered to move all the families to the new site,” he said.

The city would ensure that the families’ belongings were taken care of and try to make the relocation and temporary resettlement as hassle-free as possible, Bokaba said.

Figure 3.3: Sinkhole Relocations in Jeffsville
Source: Pretoria News (25 January 2017)

3.2.2 Methodological concerns

In closing, I will now speak to some of the significant methodological issues I encountered during the course of this study. The first concern- which I discuss in depth in last section of the chapter- is associated with the emotional difficulties of conducting a study in marginalized communities. As I will show below, my research partners were from different social backgrounds. On one hand I was engaging with the “elite⁶⁸”, while on the other was an ‘engagement with subalternity’ (Griffiths, 2017). I recognized my own place in the field very early on and was therefore conscious of the implications of the biases I held as I entered the field. To be precise, I entered the field mindful of my allegiance to the struggles of the informal dwellers. This bias, I argue, stemmed not only from being situated in a critical geography scholarship but, as I will show in the last section of this chapter, also from my positionality as a middle aged Black South African woman with political beliefs and values.

Galdas (2017) writes that recognizing and understanding research bias is crucial for determining the utility of study results. Bias can for instance shape ‘the study environment in ways that interferes with the study outcomes’ (Thompson & Panacek, 2007). While I remained conscious of these methodological concerns and equally mindful of the methodological implications of the position from which I approached the field, I personally did not know how to resolve this practical constraint. Thus, the desire for reliable and valid research outcomes, meant striving to remain objective. For instance, it was important to guard against the study being a witch-hunting exercise clouded by moral obligations. Although there is place for moral responsibility in research, as argued by Valentine (2003) it is not enough for researchers to understand the experiences of people they study, researchers also have a moral responsibility to contribute to the actual political struggles.

My second methodological concern relates to the political temporal at both national and local level of government, that played out in the City of Tshwane’s urban governance. To illustrate, my fieldwork commenced in 2018, two years after the 2016 local government elections and a few months before the May 2019 national elections. This meant my study was situated in a rather unsettling position in terms of space and timing. As such, I anticipated the research sites to be marred with some challenges. My particular concern with the 2019 elections (as with most elections in general) was the potential rise of political tensions and intolerance and their implications on my research [I reflect further on this later in the chapter].

The 2016 elections on the other hand, raised issues about ‘changing politics and changing policies’ (ref). In 2016 the City of Tshwane went through a political power transition. The Democratic Alliance (DA) won the local government elections, consequently replacing the administration of the African National Congress (ANC) - which has been at the helm of the City of Tshwane since 1994. Evidently, the situation was to some extent fluid, both in terms the city politics and the city administration. The two parties have very opposing policy positions. Thus, change in the City’s political leadership implied

⁶⁸ *E.g. various City officials.*

drastic change in city governance. Change in political leadership means change in policy position to reflect and diffuse a specific political agenda (Bunce,1980), was the case in Tshwane. My use of policy change here draws from Bennett & Howlett's (1992) reference to policy change as an incremental shift in existing structures, or new and innovative policies. They identify this to differ from policy reform, which usually refers to a major policy change. With that in mind, the 2016 brought some policy changes in Tshwane. Here it was more of a case of politics affecting the-implementation of public policy (Reich 1995:48). For instance, some of the governance strategies such as the Tshwane 2055 [engaged further in chapter 5] were replaced by Tshwane 2030⁶⁹.

Having said that, my analysis of governance tools in Tshwane was not with the aim of comparing the performance of the two political administrations. Rather, my concerns with these policy shifts were directed to the City's consistent commitment to the governance issues relating to informality, sustainability and environmental justice. After all, I still needed to accurately reflect on the events without discounting these political dynamics.

Taking cognizance of these methodological issues was not a sign of hesitation or conflict of a methodological choice on my part as a researcher. Rather, my goal was to reflect on the issues as I prepared to enter the research field. Pondering on these issues helped me crystalize what configured and constrained my data under the contemporary conditions of a South African city. I entered the field mindful that my initial research design was but a guideline to help me navigate the unfamiliar territory. Having said that, despite these methodological issues, approaching formalization in the City of Tshwane through an embedded case study was relatively smooth, as this methodological design provided a solid research environment. This capability can, to some extent, be attributed to the 'flexibility of the case study design' (McDonnell et al., 2000; Hyett et al., 2014). For example, in their study McDonnell et al. (2000) found that the overall plan for data collection were to some extent developed during the fieldwork process. In the same vein, Hyett et al. (2014) remind us of the application inconsistency that accompanies this flexibility considered as a limitation. In my case, the issue with this flexibility was its implication on the reliability and validity of the study.

Now that the discussion on the virtues and limitations of the embedded case method was amply deliberated, I will lay out my empirical process by discussing how data was collected and collated in the next section.

⁶⁹ *Although both strategies were aligned with the vision statement of the NDP (the National Development Plans)- "Now in 2030 we will live in a country which we have made".*

3.3 Research Process

The previous section fleshed out the discussion my research plan by presenting the embedded case study - with two subunits of analysis⁷⁰ - as the research design with which I responded to the question of informality and formalization in Tshwane. With that in mind, I will now turn my attention to the research process I incorporated as a strategy to implement the research plan. In other words, how I carried out the research. Incorporating the research design and the research process required that I grapple with two pertinent questions. Firstly, what is the purpose of the data I will gather? The response to this question justifies why I followed 'mixed qualitative method'⁷¹ (Schutt, 2018) as a research approach. My empirical objective in this study was to explore the beliefs and assumptions that influence the decision-making which shapes formalization as policy process, as well as the interplay between a wide range of key stakeholders (Colebatch, 2010). To pursue this objective meant that I needed a qualitative form of data.

Secondly, I needed to explain how that data would be treated. I will present this debate in two different segments. I start off by laying out the data collection techniques I employed to extract data from various sources. I open this debate by illustrating how the data collection process followed a specific pattern⁷² [see figure 3.4]. Following that, I demonstrate how I approached 'mining data from documents' (Merriam, 1998). While document analysis - generally described as a systematic procedure for reviewing or evaluating both printed and electronic material (Bowen, 2009) - is useful in generating institutional empirical data, questions about governance would also require that I source the views of the people. In consequence, I resorted to conducting interviews with local urban governance stakeholders. Many studies continue to place local government officials as key role players in understanding the social life of policy in practice. I, however, also needed to pay attention to the interpretative perspectives emanating from bottom-up interactions with policy practice (Peck & Theodore, 2012). To account for those views, my interviews also probed the governance rationales of the informal dwellers. Although interviews, in addition to document analysis, yielded valuable empirical evidence, I enhanced interview produced data with unstructured participant observations. In consequence, I will also cast 'reflections on observations' (Jenkins et al., 2018). To bring this discussion to conclusion, I will deliberate on the framework I adopted to analyse the generated data paying further attention to triangulation. The idea was to capitalize on the 'effective combination from documents, interviews and field observations' (Schutt, 2018).

⁷⁰ Phomolong and Jeffsville.

⁷¹ Qualitative researchers often combines one or more of these methods. Different qualitative methods may be combined to take advantage of different opportunities for data collection and to enrich understanding of social processes (2019). While this approach is also termed mixed methods, it differs from the mixed method resulting from combining qualitative with quantitative methods (Schutt, 2019)

⁷² When I started out, I had planned to first conduct interviews. The aim was to enter the field without preconceived ideas. Nonetheless, research ethics approval played a role in how the process unfolded.

3.3.1 Rationale for the qualitative approach

My choice of qualitative research approach was mainly motivated by the need to gather suitable empirical data that can satisfactorily address the research question. The focus of this study on formalization and just environmental governance in the City of Tshwane, explains the interest in policy analysis as one of the techniques of data collection. Here, I take my cue from Corburn's (2017) argument that researchers must start urban environmental justice research by asking what institutional decisions may have contributed to today's inequitable burdens over time. In this study, I also had an interest in exploring the intersections of environmental governance logics (formalization, sustainability and environmental justice) that seeks to address unjust and marginalized living environments in informal spaces. However, it is obvious that questions about 'just' environmental governance cannot be answered only through 'secondary sources' (Leedy and Ormrod, 2015) such as policy documents. Meaning, responding to such questions would demand taking into consideration the beliefs and knowledge of the people. For example, my aim was to explore the perspectives framing the decision-making rationales of various policy stakeholders in relation with the formalization of informal settlements. Thus, to be able to catch an empirical glimpse of these insights required that I conduct interviews with local urban policy stakeholders or actors.

In the end, questions about the critique of power requires rich body of evidence. Hence, the qualitative method was suitable as a tool of inquiry for this study. This research approach enables the generation of empirical data from multiple sources. For instance, primary data can be collected through conducting interviews with local governance stakeholders in multiple settings. As illustrated in figure 3.1, In Tshwane, I was able to rely on qualitative methods to conduct interviews with informal dwellers at different levels of permanency [see chapter 6], in different sites with different stages of formalization. In addition to the interviews, I collected secondary data through various techniques such as document analysis, photo observations and unstructured observations. It is this capability to produce rich text data that renders qualitative inquiry as a suitable method for the 'generation of rich contextualized understandings of phenomenon under study' (Jenkins et al., 2018).

In consequence, following a quantitative research approach would not suffice in addressing the research question central to this study. This is especially true given the numerical nature of its data collection techniques [questionnaires and surveys] and statistical analysis (Rehman & Alharthi, 2016; Schutt, 2018). On the other hand, a mixed method of inquiry comprising of both qualitative and quantitative methods can be 'useful in carrying out in-depth study of a phenomenon under investigation' (Schutt, 2018). Having said that, a lot of quantitative research tends to remain densely positivist (Rehman & Alharthi, 2016). The criticism of positivism is that it believes in a 'single, stable reality' (Neuman, 2014). In other words, researchers come in as objective observers to study phenomena that exist independently of them and they do not affect or disturb what is being observed (Rehman & Alharthi, 2016). Considering that I have taken the cue of critical geographers at heart, who are influenced by a 'post-positivist shift' in which the presence of the researcher influences the data that is collected (see also Cox, 2003), use of quantitative data was leaning towards critical quantitative research.

Thus, my choice of qualitative methods remains intrinsically linked to my ontological position, which influences our perception of the nature of reality, our sense of reality, or the way we see the world (Haynes, 2017). As argued by Mertens (2005) a researcher's theoretical orientation has implications on every decision made in the research process, including the choice of method. As already stated, I entered the field mindful of my allegiance to the struggles of the informal dwellers. While this position 'makes explicit my relationship as researcher and with the research subject object' (Haynes, 2017). In the same vein, I had a methodological obligation to examine power dynamics between the state and the people as a one-directional process portraying only side of the dweller as the recipient of poor urban policy outcomes. It was important for me to guard against the study being a witch-hunting exercise clouded by moral obligation. In the end, the reflexive nature of qualitative research created the opportunity for a research environment that would bring the reflexive consciousness.

- [Entering the field with local urban governance stakeholders]

Above questioning the self, qualitative research methods enable us to consider our epistemological assumptions. For instance, Helfenbein (2019) suggests that the implications of qualitative research are not only its challenging of the Western dominance on theoretical frameworks, but also its suggestion that the Western dominance obscures further aspects from formulating new understandings of qualitative experience.

The significance placed on the local government as an important stakeholder in the developmental state in post-apartheid South Africa (RSA, 1998), has brought the spotlight on local governance actors and the governance of urban informality. This focus was revived by recent theoretical advances in sustainable and 'just' urban governance. Urban governance has been generally described as conflictual and complex, constituted by a diverse cohort of stakeholders, each with their own rationalities and competing interests (Smit, 2018). While the study of urban informality has found expression as an interesting subject of inquiry in postcolonial studies, there remains a paucity of literature in how the intersections of the rationalities of city officials and informal dwellers play out in governance.

These shortcomings can be attributed to two identifiable gaps. Firstly, urban theory research has placed an extensive focus on socio-spatial and environmental inequalities, particularly in informal spaces produced by unjust urban governance processes. What seems to be receiving less attention though, is the voice of the informal dweller in shaping these governance practices. While postcolonial and southern studies have, rightly so, challenged this position by questioning the marginalization of the southern voice in urban theory, informal dwellers continue to be studied as 'objects of governance' (Smit, 2018), rather than as equal actors and stakeholders in urban governance. As argued by Griffiths (2017:9) The debate in geography around representing the postcolonial other has for too long taken place without attempts to integrate subaltern experiences, even if recent work has been addressing this very issue. However, in urban governance and policy debates, addressing the exclusion of the subaltern other is an ongoing challenge as highlighted by Muchadenyika & Waiswa (2018), who argue that: *"In African cities, informality is on a tremendous rise, meaning slums are a permanent feature in these cities. Hence, slum dwellers are vital stakeholders in city planning and governance. As such, we argue that inclusive*

municipal governance is fundamental in the success of slum upgrading initiatives. This is through mayors, councillors and city managers incorporating the aspirations and imaginations of slum dwellers in the planning and management of cities”[p:66].

While this is a step in the right direction, more needs to be done to elevate the voice of the informal dweller in environmental governance debates. In most urban environmental governance debates, the informal dwellers are presented as accepting and contented with their environmentally inadequate living environments. In sum, by studying informal dwellers as key actors in local environmental governance we are able to see them more than “blank subjects” consumers of policy or “just automatons” of the state (Prince, 2010). As my subsequent analysis shows, permanency has also conjured up a new identity formation - the permanent dweller. Let them speak for themselves: As I argued in Chapter two, subalternity spaces occupy a negative position in the spatial imaginary of the Northern framed sustainable city paradigm. Debates speak of the informal dweller as the bad element in the production of space. Permanent dwellers and those in waiting allow me to interrogate the production of the environment using a state produced identity -the permanent dweller.

On the contrary, city officials are assumed as legitimate stakeholders in urban environmental governance. They are positioned ‘as coordinators of expert knowledge on environmental problems’ (Brand, 2007), who in the end are legitimised to ‘register claims of environmental problems, usually through a network’ (Lidskog, 2001). These networks produce, maintain and distribute knowledge at local, national and international through complex social and political processes (Lidskog, 2001) maintain and distribute knowledge at local, national and international through complex social and political processes (Lidskog, 2001). In Tshwane this network has been emboldened by the establishment of the Sustainability Unit as a key stakeholder in the city’s environmental governance.

Challenging the urban theory-from a Southern perspective means we must broaden the-environmental urban governance decision-making beyond institutional actors such as city officials as the sole legitimate stakeholders. I sympathise with Myers’ (2011:14) argument that the challenge for African urban studies no longer lies simply or solely with paying attention to the marginalized, informal, invisible spectral, metropolitan or ordinary settings across the cities of the continent. I am however, also of the view that to counter the Western dominance of qualitative experiences requires tweaking our set of methods for gathering more in-depth knowledge on African urban policy actors by provincializing the local urban policy actors in southern cities. In wanting to enter the research field with local urban governance stakeholder implied delineating who local urban governance actors are. While the city officials were an obvious target as policy stakeholders, particularly those from the Department of Housing, as well as those from the Department of Environmental Management and the Sustainability Division. I was also aware that to be able to gather rich qualitative data that would lead to insightful analysis would also require engaging with the ‘target population’⁷³ (A. Schneider & Ingram, 1993) as equal stakeholders. In this way, I would capture a range of views and perspectives. Thus, I also sought the inputs of informal dwellers, community leaders and ward councillors.

⁷³ The context of the target population here draws from (Schneider & Ingram, 1993) conception of the people to whom those policies are directed.

3.3.2 Approaching qualitative data collection

This study employed a systematic data collection strategy constituted of a series of data collection activities. Data was collected across three stages, in a period of more than a year and a half. Figure 3.4 paints a broad picture of this process. This data collection strategy was mainly dictated by technical impasse imposed by the pending research ethics approval⁷⁴ from the Ethics Committee at the University of Pretoria. To fill this pause of four months, as I waited to fully enter the field, I preoccupied the initial stages of data collection stage with document analysis. Here, I capitalized on the flexible availability of documents as data sources that can be reviewed constantly. Starting data collection with document analysis was also informed by my objective to have a solid contextual understanding of my research field. Here, my reasoning resonated with Bowen's (2009) claim that information and insights derived from documents can be valuable additions to a knowledge base.

This meant that gathering of data through interviews was now delayed. Hence, as I waited for the Ethics Committee approval, in March 2018, I undertook an informal self-acclimatisation to my field work by visiting Phomolong and Jesffville. This exercise served two purposes. In the first instance I was to have an overall understanding of the background context and physical layout of the two settlements. In this way limiting the potential cultural shock to which Hammersley & Atkinson (1995) argue may potentially hit an observer's initial interaction with the unknown observation site. The cultural shock may be potentially induced by the preconceived expectations that an observer used to frame their understanding of the site. This was mainly a reflexive response in order to mitigate the potential influences the site might have on me as an observer. Second, I was able to test the research environment⁷⁵, especially for issues of access and rapport. In the end, this exercise not only placed me in a position to have an intimate grasp of the study sites, it also enhanced my sense of ease prior to interactions with my interview respondents. The ethics approval was finally granted 3 months later, in July 2018, giving me the go ahead to conduct interviews with various stakeholders.

To further, familiarise myself with the study sites I saw the media as the best starting point [see Appendix 2]. As a result, I also conducted an extensive media search that allowed me to harvest data on past incidents of interest at the same time given the sense of the spatial organization of the study sites. For that, I turned to location maps generated by the City of Tshwane. I also relied on the base maps' gallery of the Gauteng City Region Observatory (GCRO)-attached in Appendix 9.

⁷⁴ Ethics approval was required to undertake interviews.

⁷⁵ In Jeffsville I stopped at a fruit and vegetable stall buying some of products and making small talk.

Period		Location	Research Activity
2017 February March June December		Pretoria	Research proposal
		Grenoble	Research ethics application start
2018	Stage 1- Fieldwork	Pretoria Grenoble	Document analysis
	Research Ethics Approval [July 2018]		
	Stage 2- Fieldwork	Pretoria	Conducting interviews
		Pretoria	Transcribing Interviews
		Grenoble	Transcribing interviews
Grenoble		Coding	
2019 to 2021	Put Everything Together		

Figure 3.4: Research Process

Source: Author (2021)

3.3.2.1 Document analysis

This study had an objective to explore the governance of informality. I therefore relied on various documents as sources for generating secondary data. As pointed out by Merriam (1988), ‘documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem’ (p. 118). A total of 25 documents, at both national and local government level, were reviewed and analysed. The documents were purposively sampled using a clear rationale, both in terms of the nature of the documents and the time at which they were created (Saunders, 2011). Table 3.1 presents a consolidated account of those documents. The sampled documents included national legislative framework⁷⁶- Acts, White Papers and policy programmes regulating housing, informality among others, from 1994 to date. In a post-1994 South Africa, a large body of housing-related policies and legislation was introduced. The RDP (the Reconstruction and

⁷⁶ These documents were accessed electronically from various national government websites (see Appendix 1).

Development Programme) was the first policy framework adopted during that period. It set the blueprint for the legislation framework including housing policy.

Given the focus of my study on governance of housing informality, with particular interest in the City's policy programme of formalization, I turned to the housing policy as source for context on policy intervention on informality. In that regard, I systematically analysed national housing policy documents starting from the RDP followed by the 1994 White Paper on Housing up to the UISP/NUSP - which sets perspective on formalization. These documents were mainly focused on formal housing provision as a means to addressing informality. The limitation of these housing policies was that little attention was paid to the environmental conditions (and implications) of existing informal spaces. Nevertheless, the documents were useful in providing some insights on the state's attitude towards informality since 1994.

At that point, I then turned my focus to the City's perspective on UISP. The City's insights on formalization are mainly captured in two notable housing policy programmes, Project Reaga Tshwane and Project Tirane [discussions in chapter 6], which were respectively introduced in 2017 and 2019. The third programme, the Letsema Project was introduced in 2019⁷⁷. Despite the significance of the formalization to the City's efforts against informality, the documents on these programmes were fragmented and not readily available on the City's formal platforms. There was also no consolidated formalization policy in place. The only formal source of data on formalization was the City's Sustainable Human Settlement Plan [see chapter 4], a 114 paged document, with snippets on formalization totalling about 3 pages. Merriam (1988) reminds us that locating public records is limited only by one's imagination and industriousness, because if a public event happened, some official record of it most likely exists. In that vein, I searched for political statements made through various local media to gather more information on the City's formalization programmes. I, therefore, examined archived media research- primarily electronic issues articles - from various local newspapers such as the Pretoria News and the Rekord [see appendix 2]. The articles were also weak on sources and 'selectively biased' (R. K. Yin, 2014). I had also hoped to include in the sample relevant documents in relation to the formalization of the two informal settlements, such as minutes of meetings, council approvals etc. In my view, these documents were a potential source of rich data. Unfortunately, these were also not accessible seemingly, due to an institutional memory gap.

My research objectives also included examining policy prescripts on environmental justice and sustainability in the City of Tshwane. To access that data, I looked at urban governance documents on sustainability and environmental management. City by-laws guide and regulate the affairs and the services the municipality provides in its area of jurisdiction. I also examined other relevant council documents such as council resolutions and political addresses for reference. City related documents were accessed through the City's website [www.Tshwane.gov.za].

⁷⁷ This was a year after my fieldwork- to be precise during the height of writing the thesis, leading to adjustments of my analysis.

Document Type	Document Description	
Housing ACTS & White Papers	RDP (1994)	Natives Land Act 1913
	White paper on housing 1994	Urban Areas Act 1923
	Housing Act 1997	Group Areas Act 1950
		Prevention of Squatting Act 1951
		Group Areas Act 1966
National policy programmes	NUSP (2015)	National Housing Code (2009)
	UISP (2004,2009)	
	BNG (2004)	
By-laws	Informal settlements by-laws	Noise Management Policy (2004)
	Waste management (2016)	Air pollution
City strategy documents	Tshwane 2055	
	IDP- 2011-2016 IDP 2013-2018 IDP- 2017-2021	Integrated waste management strategy
	SHSP (2013)	Green building development policy
Political Addresses	State of the City Address 2013	State of the City Address 2015
Media archives	Pretoria News	Eyewitness News
	The Rekord of Tshwane	The Mail and Guardian
Newsletters	Tshwane update	Sustainability Week Magazines 2016 to 2018
Table 3.1: A Sampling of Pre-Existing Documents Source: Author		

To sum up, my aim with using document analysis in the case of Tshwane was two-fold. In the first instance, a systematic review of documentation unleashed supplementary research data that provided the context I needed to understand the sociocultural, political, and economic context under which informality governance is deployed. Secondly, documents provide data on the context within which the research participant operates (Bowen, 2009). This data was valuable to observe the extent to which the city officials were acting within the confines of urban governance. For example, I was able to use data drawn from documents to contextualise data collected during interview conversations with city officials. The debate in the next subsection shifts to the processes of entering the field and the techniques used for data collection.

3.3.2.2 Structured interviews

- [Entering the field: Access, Rapport and Trust]

Conducting interviews with local policy stakeholders - which included city officials, ward councillors and informal settlement dwellers - constituted the bulk of my data collection scope. Once I was given the go ahead by the Ethics Committee, I needed to consider issues of accessing the research site and 'establishing trust and rapport with potential participants' (Thummapol et al., 2019). Suffice to say I employed different strategies for approaching participants in informal settlements and the city officials.

As indicated above, I began to acclimate to my field work by visiting Phomolong and Jeffsville whilst anticipating the Ethics Committee's approval. This exercise did not completely address accessing and making first contact with participants, which I pre-empted as potential challenge for my fieldwork. To be precise, as I was preparing to enter the field, I was concerned about the possibilities of being denied access to informal settlements. Not so much the denial of physical access, but the refusal to respond to my inquiries. My concerns were informed by probable misidentification as a politician using the informal settlements to lobby for votes. As I said, my fieldwork commenced around the time when the country was about to prepare for its national elections. To be frank, I was not sure how I would deal with being denied access, given that Phomolong and Jeffsville were the only two sites in Tshwane (documented in media reports) that matched the profile of relevant case studies, as they presented with the environmental challenges relevant to my study objective.

Nevertheless, my access strategy was to start creating rapport with community leaders. To mitigate political misidentification, I sought to identify community leaders outside political structures - such as religious leaders and community activists. However, after failed attempts at identifying such community leaders, I then resorted to contacting ward councillors. My first step was to search for the profiles of the ward councillors using a general web search. I was able to identify the ward councillors from various media reports about their settlements. Thereafter, I searched for their contact details from the City of Tshwane's website. Luckily, the ward councillors in both settlements became very helpful in opening up access. On 25 July 2018 I met up with the ward councillor of Phomolong Mme Shadi Maja, at the Mamelodi bus terminal just across the street from Phomolong, from where we started our walk about into Phomolong. In Jeffsville the ward councillor, Mr Sedibe, was also very receptive and helpful. Both councillors introduced me to some of the community members. After that, accessing the rest of the respondents was mainly through a 'snowball effect' (Fletcher & Plakoyiannaki, 2012).

Having said that, I remained committed to sampling research participants in informal settlements using the principles of urban environmental justice research, which according to Corburn (2017) can employ

a structural racism⁷⁸ lens to identify research participants. In this study, I was mindful that although South Africa was now a post-apartheid country, traces of structural racism were still possible in processes of governance. Speaking to community members in Jeffsville and Phomolong who had a deeper background and insights on the spatial and environmental character of the settlements was at the top of my sampling criteria. However, I was particularly interested in those who were relocated out the settlements - firstly those relocated to other areas as part of a disaster management exercise post the environmental risks, followed by those who were relocated as part of the formalization process. In this regard, the media reports were not only a source of data, but they also simultaneously became a useful tool for purposively identifying some of the potential respondents in informal settlements. For example, I relied on media archives to source the responses of some of the residents who were relocated from Phomolong and Jeffsville as some of those residents were interviewed by the media.

My interest with city officials was to source the responses of those charged with housing policy and programmes on informal settlement upgrades and formalisation. I was equally interested to solicit responses from officials charged with city sustainability and environmental management, given the centrality of city sustainability and environmental injustice to this research project. To identify potential respondents, I employed a two-pronged sampling strategy. First, purposive sampling (Neuman, 2014) was done through the city's website and a general web search, to identify the relevant officials. I also already possessed some knowledge about the City's governance structure, which I had acquired as I was studying the City's planning system during my master's degree. It also worked to my advantage that I had few contacts at the City of Tshwane that were forged over a couple of years, through various professional interactions such as the City's annual sustainability conference. The sustainability conference [see chapter 5] created an opportunity to access or be introduced to some key city officials, especially those close to the processes and practices of sustainability and environmental management. Secondly, one of the conditions for the ethics approval was that I secure formal written permission⁷⁹ to conduct research within the City [see appendix 6]. That letter assisted me, in a way, with accessing and building rapport with council officials. However, that did not completely dissolve the access barrier, as it remained challenging to reach some of the officials most relevant to the study. For instance, even though some of the officials recommended a few of their colleagues as potential respondents – which could have created a snowball effect – those referrals were futile. This impediment stemmed from the unavailability of the officials, many of whom cited preoccupation with government business such a

I was also mindful that access to city Officials might be equally conditioned by the politics of the time and place (Ward & Jones, 1999). As explained above, the City's political leadership, and by implication its administration, changed in 2016. I also feared that this unsettling political transition

⁷⁸ Corburn's conception of structural racism is influenced by the Aspen Institute 2004 understanding of structural racism as bias across institutions and society and the cumulative and compounded effects of an array of factors that systematically privilege white people and disadvantage the people of color.

⁷⁹ The permission letter was granted by the City's Research and Innovation Division, as part of the conditions set by the Research Ethics Committee at the University of Pretoria. No fieldwork, both within the City council and the informal settlements, was to commence prior to being granted permission by the City.

would lead to interview respondents who were hesitant and guarded. However, that was never to be the case as it was only in a few instances that I was asked to treat certain statements as 'off the record'.

- [Interview process]

Once the I received the ethics clearance, I proceeded with structured interviews. Data had been collected from various policy documents and they were complemented with interviews from city officials. However, data collected on the perspective of the informal dweller was not readily available. Thus, in order to produce the entirety of the data, I set out to conduct semi-structured interviews in both informal settlements settings and within the City Council. I initially had no intentions of undertaking focus groups as my objective was to gather detailed data, free from the constraints of the sometimes-intimidating setting of focus groups (Smithson, 2000). However, some participants in the informal settlements preferred to respond in a group setting rather than undertake individual interviews. In those instances, I sensed the hesitation the respondents had about being seen speaking to an outsider, which they feared would have them labelled as sell-outs by fellow community members. I quickly understood the situation and became open minded about conducting focus groups. In the process I also started to appreciate the usefulness of focus groups in enhancing the 'reliability of the data' (Blades, 1990). To illustrate this, the interviews had a combined focus on current and past environmental incidents in the settlements. In such cases the interviewees relied on memory or hearsay. Thus, being in a group discussion was useful as others would fill the gaps in case of memory lapses.

I was quite conscious that, as suggested by Leedy (2014) research participants will rely on their memories when interviewed on past incidences. Though I was relying on historical memory, I upheld the main principle of constructivism, which is built upon the premise of social construction of reality (Searle, 1995 in Baxter & Jack). Constructivism facilitates the close collaboration between the researcher and the participant, I capitalized on this strength as it enabled the participants to tell their stories (Crabtree & Miller, 1999 in Baxter & Jack). This became particularly relevant as I was trying to extract stories by allowing participants to describe their views of reality, enabling me to capture much understanding behind the rationales of some of their initial undertakings (Robottom & Hart, 1993).

In the end, I conducted 45 interviews, of which 3 were focus groups. All the interviews were recorded. The consent of the respondents was sought prior to recording. Furthermore, I also explained the confidentiality of the recordings and how the recordings were going to be used. In all the interviews, I presented consent forms, which was first explained and signed by each respondent. Even with the few group interviews I undertook, each participant would be presented with a consent form. In general, I would strive to conduct the interviews under conditions that would give my respondents confidence in me the interview process. I had intentions of capping each interview to an estimated duration of between 50 to 90 minutes. However, some would be as short as 35 minutes. Throughout the process, I refrained from relating the duration of any interview to its quality.

Thirty-nine of the total interviews were conducted within the informal settlements. There the respondents included ward councillors, community leaders and informal settlement dwellers. I entered the field with no predetermined number of interviews I planned to conduct. At the informal settlements, reaching the 'saturation point' (Sebele-Mpofu, 2020) was going to be a determinant that informed my decision to halt the process. Although I am of the view that, in Phomolong, the saturation point was somehow impossible to reach as formalization is still ongoing.

- [the Interview settings]

The interview location for the city officials was set in their offices, as the interviews mainly took place during business hours and officials would choose to have interview sessions at their work desks. On one occasion, however, due to time constraints on one official's side, I had to meet them on a site where they were busy with initial stages of formalization. On this occasion, I travelled to Booyens, one of the former whites-only suburbs in Tshwane to meet city official, Mme Anna Kgalane. She was working on the resettlement of some dwellers from the nearby Gomora informal settlement. Although this specific site was not part of my research field, the experience nonetheless offered great insights for my research. At the informal settlements, interviews mainly took place outside, in the shade. This was a spontaneous place choice, given that in townships, people enjoy sitting outside in the shade during warmer seasons. The setting created a very relaxed ambience as the conversations took place under a condition the respondents were most at ease with.

The interviews were conducted in both English and other local African languages. However, a dominant language of interviewing in the informal settlements was Sepitori, "*a mixed language spoken as a lingua franca by black residents of Tshwane*" (Wagner et al., 2020), since 99.9 % of my respondents were African people in the informal settlements. Consent forms and questions were formulated in English and I interpreted them in Sepitori.

3.3.2.3 Unstructured participant observations

Although the interviews with both the informal dwellers and the city officials brought valuable insights to the study through discursive interactions, I also opted to pursue participant observations. My view of the value in the data generated through participant observations, resonated with Burawoy's (1998) argument to attain a *certain practical* consciousness will require more than a discursive dimension of social interaction such as interviews. For Burawoy this can be reached through participation which, following on Garfinkel (1967), conceptualizes as doing things with and to those who are being studied.

To augment the interview data, I decided to conduct some unstructured participant observations (Walshe et al, 2011), carried out along the interview process. I had initially intended to enter the observation process armed with a structured observation framework. I later decided to just dive into the process, in this way not setting parameters of what might be observed. Merriam (1998) suggests that the most important factor in determining what a researcher should observe is the researcher's purpose for conducting the study in the first place. The idea with the observations was to best understand people's actions, roles and behavior (Walshe et al, 2011), beyond what they verbally

articulate in their interview responses. Thus, an observation of respondents - both the city officials and the informal dwellers -, though based on varying approaches, was with the motive of having balanced views and insights on certain perspectives and social practices in relation to formalization in Tshwane.

Observations regarding the informal settlements were mainly focused on waste disposal practices in formalizing spaces. I needed more insights on how the both the community and the City approached and behaved towards waste management. Thus, one part of the observations was with the view of monitoring how interview partners (and the community in general) acted on their words in terms of their living environments. These observations were by no means a moral or value judgement, but rather a theory making expedition. My aim was to get a balanced understanding of everyday waste practices in formalizing spaces. Hence, the second part of the observations was about understanding the actions of the City in the waste management of formalizing spaces. These observations were also mainly photographed and captured in fieldnotes, focusing on the waste dumped by the dwellers, waiting to be collected by the state. Meaning that waste became a physical artifact of observation. Additionally, I sought to observe the locals as they dumped the waste. For ethical considerations, these observations were not photographed.

- [Extending the observations to the sustainability conference]

From the interviews with city officials and observations of relevant policy and strategy documents [see below], I gained some understanding of the City's sustainability and environmental practices. However, I still needed further insights on the processes that underpin sustainability practices in Tshwane. To able to achieve this, I ways to observe city officials for prolonged periods (Walshe et al., 2012). As already explained, of the key advantages of participant observation is that it allows the researcher to observe a number of related events and actions of individuals and groups over an extended period of time (Barata, 2012). The Sustainability Conference presented such an opportunity. The Sustainability Conference is a high profile, annual event with its patrons including mayors of many African capital cities, academics, senior government officials, technocrats, industry leaders on sustainability and environmentalists [see chapter 5]. The conference was conceived under the political leadership of Tshwane's erstwhile mayor, Kgosietsi Ramokgopa⁸⁰. I started attending the Sustainability Week in 2016, a year before the start of my PhD. My interest in this annual gathering rose from engaging with the concept of urban sustainability during my master's studies. This engagement was preceded by my overall interest in city sustainability that started more than a decade beforehand, in 2008, cemented by my membership with Green Building Council South Africa (GBCSA) at its early foundation stages. Having said that, I think it is relevant to mention that, at the event, my interface with sustainability had shifted. I held a social sciences mindset, which leans more towards what Clapp & Dauvergne (2011) refers to as the social green, which associates *"unequal exposure to resources as well as environmental harms to inequality and domination in economic ordering"* (p: 12).

⁸⁰ Ramokgopa was an ANC elected mayor of Tshwane.

Since 2017 the sustainability conference has been hosted under the political leadership of the DA. Part of my observations was intrigued by this political change. In consequence, my observation was from a different perspective

The 2018 conference was held as I was preparing to formally commence my fieldwork. My attendance in 2018 was a bit more strategic in that it was not only about harvesting data but also about conducting a comparative observation with what I was anticipating in the field.

- [Social media]

In this digital era it is not easy to ignore the social media contributions to some of the topical discussions around cities, policy, land reform and inequality. In South Africa today, more and more local policy debates are taking place among Twitter users, for example. While there are justifiable reservations about the 'scientific legitimacy' (I. Z. Hoffman, 2009) and ethical considerations of online data sources, the contributions of such social exchange platforms to scholarly debates should not be underestimated. For instance, debates around the allocation of land for urban housing have in particular captured my research interest. During my fieldwork and continuously throughout my analysis, the land reform debate was and remains one of the most topical, politically charged debates currently taking place in South Africa. I noted with interest the social media comments and radio interviews by a leading academic and an avid tweeker, Ruth Hall, a professor and Executive Director of PLAAS⁸¹. I will incorporate these when necessary. In addition, numerous prominent South Africans, including politicians and city mayors, take to Twitter to discuss their policy objectives and practices. Hence, the Twitter accounts of the former and current Tshwane mayors provided some useful and readily accessible debates on governmental practices and discourses in Tshwane (see Appendix 1).

In addition to Twitter feeds, I also observed YouTube videos for relevant archived news feeds on the City's informal settlements. As I was undertaking the observations, I kept at the back of my mind a constant reminder that observations and my personal interpretation of what I am observing are two different processes (Leedy & Ormond, 2014)

3.3.3 Data Analysis

Considering that the discussion will now focus to data analysis, I should reiterate that data collection was done in stages. More explicitly, data collection from pre-existing documents preceded data sourced through interviews and observations. The treatment of the data collected also adopted a similar strategy. Data analysis in qualitative research generally commences during the data collection process (Schutt, 2019). This was also the case in my study. For this analysis I followed qualitative content analysis (Kohlbacher, 2006). The purpose of content analysis is to organize and elicit meaning from the data collected and to draw realistic conclusions from it (Bengtsson, 2016). Thus, in process of collection, documents were given a first-pass review, in which meaningful and relevant passages of

⁸¹ PLAAS is the Institute for Poverty, Land and Agrarian Studies, at the University of the Western Cape.

text or other data are identified (Bowen, 2009). I started to informally develop concepts as I continued to reflect on the meanings emerging from the text.

- [Transcription of interviews]

Transcription was important not only for data capturing but also as an analytic procedure. Kvale (1994), for instance, notes that analysis begins during transcription, it does not hinge on completeness. Similarly, Schutt (2018) regards the reading of notes or transcripts as an important step in the analytic process. However, the timing of the transcription is also important. Ordinarily, in qualitative research, transcription can commence as the interviewing process unfolds, while discussions are still salient. However, as figure 3.5 indicates, my process of transcription only started in, about 2 weeks after the initial interviews were conducted. Transcribing, in my project, was a labour intensive and time-consuming exercise. Since I was under pressure to conduct all the interviews before my transit to Grenoble⁸², my strategy then became to commence the transcription process once in Grenoble. This also because I intended to fully transcribe all the 45 interviews conducted and recorded. My intention was to mitigate potential biases. Lapadat & Lindsay (1999) remind us that transcription is value laden, researchers will employ selectivity in deciding what to include in a transcript. To illustrate this point, although the interviews conducted in the informal settlements were mostly in vernacular [Sepitori as indicated above], the transcription was done in English. Only a few phrases of certain significance were 'transcribed verbatim' (Lapadat & Lindsay, 1999) with English translation provided in brackets. This meant that the rest of the interpretations were up to myself as the researcher, which raised questions on ethics (which I discuss later in the chapter).

Moreover, the process of transcribing vernacular into English raised the translation dilemmas. I was foremost concerned about the epistemological implications of translation, more precisely, the 'potential semantic loss' (Temple & Young, 2004). In my previous discussions I indicated that Sepitori is one of the popularly spoken languages by black communities in Tshwane and is constituted by numerous local languages. As a result, some of the expressions are unique to the language. Capturing some of the expression constructed in vernacular into English felt unjustifiably wrong. Particularly when considering the 'social and cultural contexts' (Temple & Young, 2004) from which the text was narrated. In the end my desire "to do justice to the meanings and voices of the participants and remove misrepresentation" (Turhan & Bernard, 2021:1), led me to working mostly with direct translation⁸³. In the end, the transcribing of informal dwellers' accounts proved more challenging and lengthier than initially anticipated. On the other hand, the transcription process for the city officials' interviews had large variations from those of the informal dwellers. The interviews with city officials were mainly done in English, with the sporadic use of African languages, thus making it easier to transcribe verbatim.

- [Data Coding and Theme Identification]

⁸² My PhD is a joint degree between the University of Pretoria, South Africa and University of Grenoble Alpes, France.

⁸³ The issue with this 'word-for word translation' is that "the data might reduce the readability of the texts because of the complex topic" (Turhan & Bernard, 2021).

Once the transcribing was completed, I then initiated the coding process. It is fitting at this point, before moving to expand on the coding process, to briefly re-introduce my embedded case study method. As illustrated in figure 3.1, my research strategy involved having multiple units of analysis. Two Informal settlements of interest – Phomolong and Jeffsville including their associated informal settlements – were engaged to create a multisite environment. For Baxter & Jack (2008) the powerfulness of embedded the case with subunits of analysis rests with the fact that: *data can be analyzed within the subunits separately (within case analysis), between the different subunits (between case analysis), and across all the units (cross case analysis)* (p:550). Jenkins et al. (2018) vividly captured this thinking in figure 3.6. Because my goal was to ‘enhance understandings of context’ (Jenkins et al. 2018), I opted to pursue analysis within-site analysis. By that I mean, I sought to uncover codes and themes within each of my informal settlements separately.

I started the within-site analysis by separately coding interviews from each of the two informal settlements and for the city officials. This ‘initial coding’ (Saldaña, 2009) was captured in word processed coding sheets [see figure 3.5]. I must add that, to initiate the coding process, I familiarized myself with dozens of coding and theme identification techniques and strategies particularly those from Saldaña (2009). The objective was to assemble a ‘fit for purpose’ coding system that would support my efforts at bringing the best out of the data analysis. The lack of clear guidelines on wrong or right, suitable or unsuitable coding techniques, motivated this objective. Drawing from Saldaña’s (2009) list of coding techniques. I built a hybrid multi-layered coding strategy constituted by Descriptive, Process and In vivo coding techniques. Figure 3.5 is an illustrative example of the hybrid coding strategy I created on word processor:

Descriptive coding according to Saldaña can help to extract what the data represents (Saldaña, 2009). In a way, descriptive coding reflects the researcher’s perceptions. However, I also had interest in understanding the participants’ own interpretations in relation to the overall world view.

- Hence, I also adopted In vivo coding which, according to Saldaña (2009), is useful in helping us to preserve participants' meanings of their views.
- To reinforce those interpretations, I also applied ‘values coding’ (Saldaña, 2009), as it seeks to reflect on the values, attitudes and beliefs that represent the participant’s perspectives.
- To further expand on those interpretations, I also employed Process coding to unearth how respondents interact with consequences and causes of the phenomenon observed in the field, and attach to the structural consequences and cause emerging from their social world (Saldaña, 2009).

Although this coding strategy was mainly informed by wanting to extract holistic meanings from data and to enhance my analysis, I was simultaneously conscious that the process of selecting the coding technique was also raising questions on my values and ethical position as a researcher.

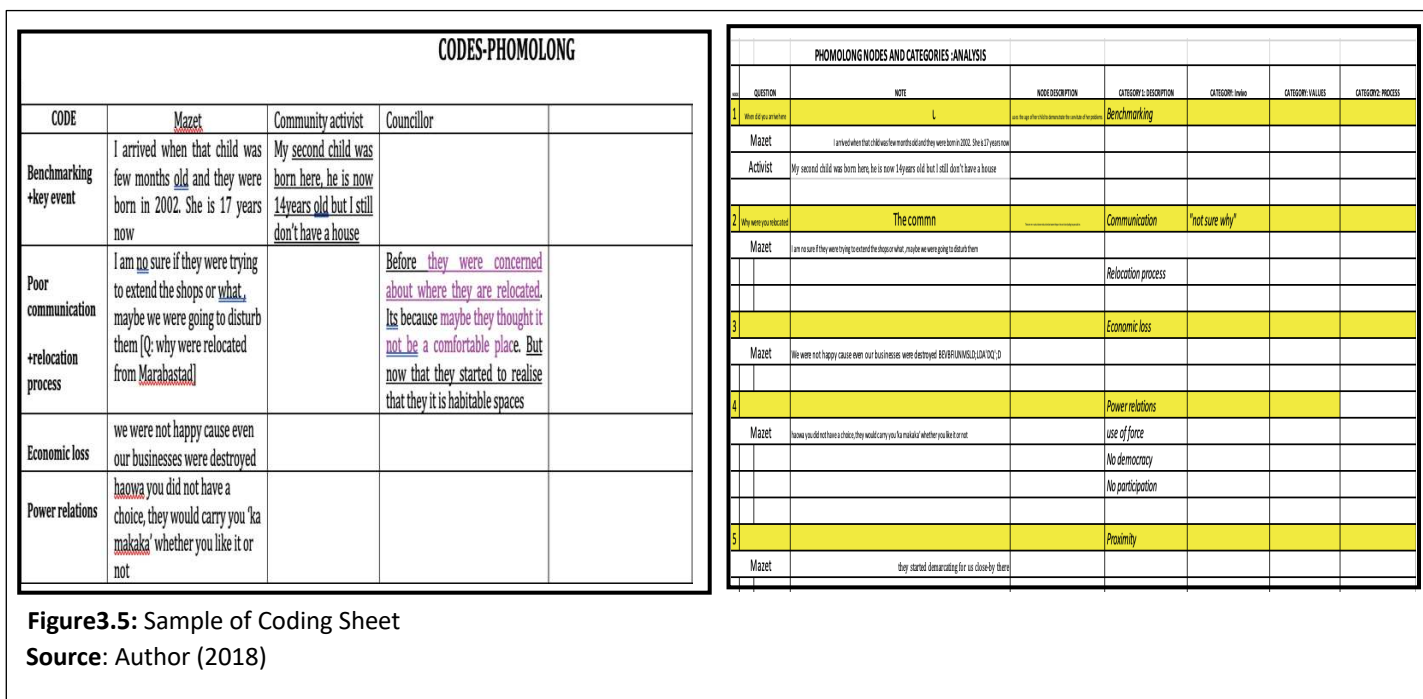


Figure3.5: Sample of Coding Sheet

Source: Author (2018)

As Schutt (2018) reminds us, coding is the first step in data analysis as we attempt to move from our focus on raw data towards themes development. Once the coding was completed for each of the three unit of analysis – Phomolong, Jeffsville and the city officials, I was ‘intimately familiar with each of my sub cases as the process allowed the unique patterns of each case to emerge’ (Eisenhardt, 1989). I then moved to the second round of coding, that leaned on ‘pattern coding’ (Saldaña; 2009). Here, I not only focused on common codes emerging within each unit of analysis, but I also started to ‘collect similarly coded passages from data corpus’ (Saldaña, 2009) and grouping those codes into themes. Following that, an additional coding sheet was created. Here I interweaved codes from the three interview scenarios to observe further emergent themes.

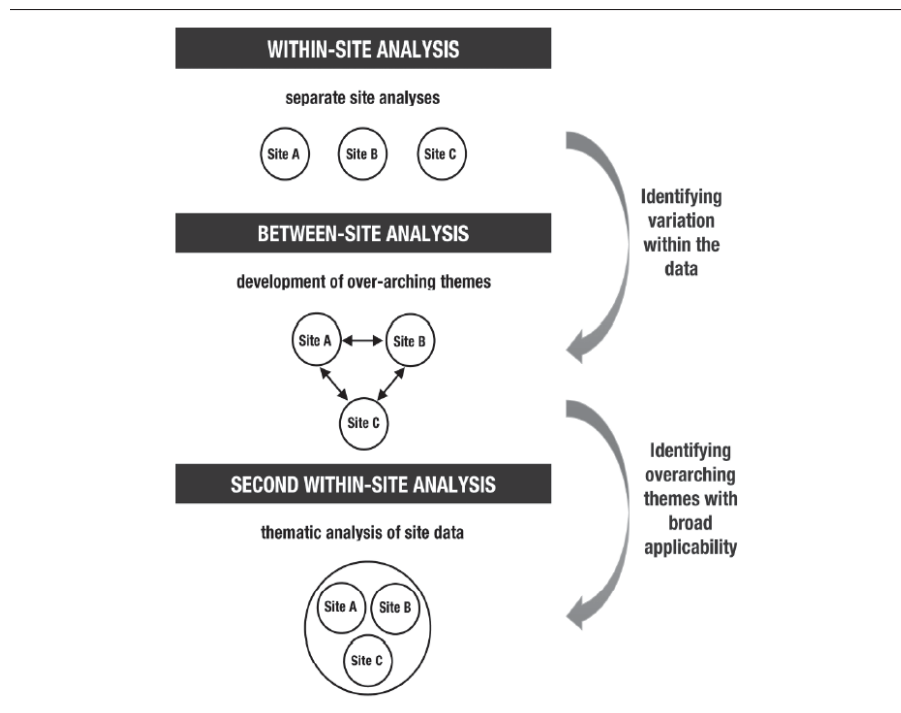


Figure 3.6: Embedded Case Analysis Process

Source: Jenkins et al.(2018)

- [Triangulation of data]

Although my themes and sub themes were matured following the data analysis process discussed above, I needed to also ‘interrogate the data at a particular level’ (Welsh, 2002). Thus, I employed Nvivo⁸⁴, a data analysis software, to further ‘enhance the rigour of my analysis’ (Welsh, 2002; Schutt, 2018). My goal with Nvivo was to incorporate data ‘triangulation’ (Bowen, 2009; Denzin, 2007; Patton, 1990; R. K. Yin, 2003) in my analysis strategy. Triangulation involves the synthesising of multiple sources of data from documentary evidence with data from interviews and observations. Hence, the proponents of triangulation as an analysis strategy, including Patton (1990), contend that it minimises bias and establishes credibility and enhances the validity of the study. Following the data analysis, I was now sitting with diverse data from coded interviews, analysed documents and participant observations. The next step was to import this data into the Nvivo analysis software.

⁸⁴ Nvivo is computer-based data analysis programme. My data analysis processes started around the time of my stay in Grenoble. The university offers intense training and licences for PhD students interested in using the Nvivo software. Thus, it was more logical for me to utilise this software. Besides these conveniences, the software is lauded as one of the most efficient qualitative data analysis tools by scholars. The software supports qualitative researchers to organize, analyse and find insights in unstructured or qualitative data like interviews, open-ended survey responses, journal articles, social media and web content, where deep levels of analysis on small or large volumes of data are required.

3.4 Ethical Considerations

Conducting research with human research subjects raises several ethical considerations. On one hand, ethical considerations paramount in ensuring that research is undertaken in the most appropriate manner to protect the interests and well-being of participants (O'Hara & Higgins, 2019). On the other hand, ethical considerations have epistemological implications. Valentine (2003), for one, reminds us that Feminist geographers in particular have been at the vanguard of questioning how geographical knowledge is produced and trying to define ethical ways of working with rather than on research participants. It is, therefore, with this in mind that I end the chapter with an attempt to layout the ethical considerations that underpinned my fieldwork and how those shaped the politics of my fieldwork. Here, I wish to acknowledge my positionality in the field, in particular, my identity as a Black middle-aged woman and how it enabled me to navigate the field. I interrogated how this insider position (Turhan & Bernard, 2021) implicated the research process – how I ask questions and the quality of the knowledge produced – and the ways a geographer might or should document accounts of injustice in a postcolonial context (Griffiths, 2018).

Having reflected on my positionality, I concluded we cannot look at positionality without examining our reflexivity⁸⁵. In this study, reflexivity helped me to consider how the effect of my positionality will implicate 'the product of that research' (Haynes, 2017). As argued by Alvesson & Skoldburg (2000) Reflexivity involves awareness that the researcher and the object of study affect each other mutually and continually in the research process. Having said that, this section explores the core ethical issues of consent, confidentiality and anonymity. Here, I discuss how, while mitigating these ethical considerations in my study, I also sought to make 'ethical decisions that accommodates a researcher's moral outlook as well as professional guidelines (Wiles et al., 2008).

⁸⁵ Haynes (2012) points out that there are multiple levels of reflexivity. Meaning that reflexivity occurs on a number of levels and on several different themes, within, and arising from, these two accounts- namely theoretical reflexivity and methodological reflexivity (Haynes, 2012). In this study I engaged particularly with methodological reflexivity.

- **[Entering the field: reflections on my role as a researcher]**

Before embarking on my role as researcher and field observer there were a number of pertinent ethical issues I had to bear in mind. Previously, in this chapter, I acknowledged my emotions and their potential implications on the process. Being emotionally invested in research is not uncommon. There is a high likelihood of a researcher getting emotionally attached to the research situation (Leedy & Ormrod, 2015), which can be a form of obstruction. Furthermore, Valentine (2003) draws from Laurier and Parr (2000: 99), to remind us that acknowledging emotions and emotional exchanges orientates us differently within our research interview (2000: 99). As I stated above, I entered the field mindful of my allegiance to the struggles of the informal dwellers. A variety of observations including inequality, high levels of youth unemployment and very poor living environments [waste related environment injustice] became overwhelming. At the same time, I feared that being emotionally invested with the field may unwittingly influenced my judgement, with potential implications on the credibility of my research. In my view acknowledging this position upfront helped me to not only to account for the preconceived ideas I held as I approached the field, but it also ‘kept me erect’ (Burawoy, 1998, p. 4). Meaning that, I was always self-conscious of my ethical conduct. As a way of mitigating this emotional investment, I kept a field diary throughout the research process, to reflect on and document my emotions from the research environment. This arguably addressed a reflexive awareness that Haynes (2012) urges us to be observant of – our shifting sense of self as both subject and object of the research, of belonging to the research and being outside it.

Moreover, accounting for my emotions also enabled me to reflect on my position as a PhD researcher and a professional middle-aged Black woman and the implications to the research process. This position was significant in various ways. First, as middle-aged woman, born and bred in the townships of South Africa means I have lived and experienced some of the struggles⁸⁶ that many in the informal settlements are facing, although, I must admit, it was not on a similar scale. Moreover, I am also currently socially classified as being among the black middle class in a post-1994 South Africa. Nevertheless, I can say the circumstances that framed my background were somewhat similar.

However, that ‘sameness’ (Valentine, 2003) did not absolve me from the baggage of an ‘insider and outsider’ position. Although others, including Mullings (1999), have questioned what makes one a cultural insider or outsider and whether it makes a difference all. Although these sentiments are generally raised in relation to scholars from the global North pursuing fieldwork in a Southern environment. Valentine (2003) addressed the issue of insider-outsider positionality by differing from the views of both early and cotemporary feminists. Here Valentine sought to present an argument that dispels the idea that researcher’s insider positionality implies they have a truer access to knowledge and a closer connection with the informant than those who are positioned as outsiders Valentine (2003). I am, however, of the view that local researchers, such as myself, who share strong cultural similarities with their research partners, also need to keep in check their positionality and its implications on research outputs. In my case, for instance, my positionality created a certain level cultural expandability. Meaning I could interact with and in-between different classes of respondents

⁸⁶ By struggles here I refer to poverty, marginalization and service delivery issues.

with ease. To be precise, I was equally at ease in settings of subalternity [of informal dwellers], as I was in those of the elites [of city officials]. A 'reflexive awareness' (Haynes, 2012) of this expandability calls for clarity on my biases in both settings and their implications on knowledge production. There is a possibility that, to a certain extent, my interactions with respondents in informal settlements were always an informal affair that felt more like storytelling sessions. Whereas, with the city officials, interactions required that I be on my toes, clear in my thoughts and about concepts I raised during the interview process. Nonetheless, in all instances I strived to present myself with humility and respect, the two basic principles must remain the bottom line for good fieldwork (Peake & Trotz, 1999).

Secondly, my position as a black South African woman created an opportunity to conduct research in the informal settlements with a certain level of ease in the research process. This ease stemmed from speaking a similar language to the research participants which, one can argue, made it fairly easy for others to feel at ease around me (Lawhon, 2020). South Africa is a polylingual country (Lawhon, 2020), with 11 officially recognized languages. There are also various types of slang spoken in different areas. Being a local and fellow Tshwane citizen, meant that I was able to converse through the language. Thus, conducting my research from that position of ease in the context of language enabled me to ask questions in ways that broadened my access to knowledge. I was, nonetheless, mindful that my insider position as Black South African did not make me an expert. I concur with Twine's (2000) argument that sharing the same race and ethnic background with research participants does not always have a positive effect on the translation. Because, one still needs to find proper ways of representing the individuals' meanings by considering which "word is best in a sentence in a language" (Temple & Young, 2004, p. 164).

My insider position (Turhan & Bernard, 2021) as a middle-aged professional woman has certainly facilitated many privileges in the field. However, my identity was often blurred and misidentified by some of the community members. For instance, during my fieldwork, I was surprisingly overwhelmed by my mistaken identity as a representative of the State. Some community members assumed I was there to provide social development through jobs or community projects. In some cases, despite clarifying my identity, some would ask me to find them jobs. Furthermore, others assumed my research findings would translate to immediate policy changes in their favour.

Having said that, at this point I seek to also point out that the research process was conducted under the strict ethical regulations (Wiles et al., 2008) approved by the Research Ethics Committee at the University of Pretoria⁸⁷ [see appendix 5]. The overall objective of these ethics guidelines was to basically safeguard that research process were carried out with integrity and moral consciousness. They particularly took care of issues of consent, privacy and confidentiality during the research process, regardless of the profile of the research partner. Wood's (2006) argument suggests that research practices and protocols such as informed consent and security procedures help ensure that field researcher does no harm. Whilst I concur with Wood, and I also carried these ideals through the

⁸⁷ Although my PhD was a dual degree between Pretoria and Grenoble, I was guided by the research ethics of Pretoria given that Grenoble does not have any formal ethics approval process.

research process, it is also imperative to acknowledge that as individuals, we cannot always be in control of the research environment. Nevertheless, I took all the relevant measures to protect my research participants. For instance, although all of my research participants were of adult age, I presented each respondent with a consent form⁸⁸ [see appendix 7] prior to the commencement of the interview. Some of the key highlights of the letters of informed consent were that the interviews would be voice recorded and that the voice recordings would be kept confidential. These assurances of confidentiality were, foremost, informed by wanting to make the respondent at ease with the interview, enabling them to respond freely knowing that their identities were protected, especially from physical danger in case of rising potential political discontent [further discussed below]. I also explained that the consent forms were by no means a trivial, meaning they were entitled to pull out of the study at any time, or to not respond to any question they found inappropriate. This pointed to my reflections on the equal status with my research partners. As argued by Haynes (2017), reflexivity enables the power relations in the research process to be more explicit.

Gathering data through 'visual methods' (Wiles et al., 2008) also raised ethical concerns. The usefulness of photography in providing context about a social setting has made it popular as a tool for data gathering in social research (O'Hara & Higgins, 2017). That being the case, ethical considerations in such settings become an issue of concern. In my case, the 'construction of images' (Wiles et al., 2008) was solely through still photos [no video productions were undertaken] of public spaces such as streets and waste-dumping areas were, to capture the land conditions and the habitable land environment. No photos of the research participants were taken. In instances where I needed a photograph of the interview respondent's personal surroundings, I not only asked for consent to photograph, but I also put into context how the photograph[s] would be utilised. While the research parameters of my photography were clear, there are also questions about the nature of photographic methods, which means there are important additional practical considerations stemming from their application in the field (O'Hara & Higgins, 2019). In field, I was not only stuck with asking "what do I take pictures of?" (Wiersma, 2011, p. 208), but also how do I take photos of the public surrounding in a manner that does not compromise the privacy of community members not forming part of the study and, most importantly, the children. Subsequently, it became somehow challenging to take pictures, not only due to the restrictions posed by ethical regulations (Prosser, 2014), but also to avoid rousing discomfort from the community in general. For example, taking pictures of the water tankers in Jeffsville and Phomolong, as reflected in images in figure 3. 8, was complicated by issues pertaining to the privacy of the communities. Although these appear to be simple images of community activities, to some of the community members they were tantamount to an invasion of privacy. In one incident, a community member in Phomolong emotionally described the act of being photographed as being offensive. Hence, I agree with Brannen's (1988 cited in O'Hara & Higgins, 2019) argument that we cannot pre-anticipate the problems that may arise in field.

⁸⁸ These letters of informed consent and interview schedules were customized to fit each target respondent group.



Figure 3.7: Modes of Water Collection in Jeffsville and Phomolong
Source: Author (2018)

- **[Local power dynamics and identity politics]**

These ethical considerations were just a few of the many dilemmas that arose during the course of fieldwork (Wood, 2006). Hence, preparing for the field goes beyond just methodological preparedness. As argued by Lisiak (2015) All these things—the objects we carry with us, the way we move, the way we speak, the clothes we wear, the hairstyle—create an impression of who we are. I was particularly aware that how I appeared in the research situation mattered (Lisiak, 2015). Thus, I made an effort to position myself as a non-political party affiliated researcher, especially when speaking to communities in informal settlements.

I had anticipated, and to some extent was prepared, to be misidentified⁸⁹ as a political party agent. As I already said, I started my field work on the eve of the 2019 national general elections. In general, the

⁸⁹ Nonetheless, the mistaken identity, in way, provided an opportunity to initiate conversation.

electioneering⁹⁰ period creates a platform for political contestations, particularly highlighting the role of informal settlements as key stakeholders in local politics. Since the dawn of democracy, the local media have been constantly covering informal settlements as spaces of political contestation and insurgence during the election season. The debates on informal settlements as marginalized spaces beset with basic services deprivations, have been widely covered in literature. There are assumptions that the state does not, generally, listen to marginalized people, igniting what Chatterjee (2004) conceptualizes as the political society, which defines as a sector of the community that resorts to violating the law in order to secure habitation and livelihood. Nonetheless, during the election period politicians and their respective political parties seize on these situations as a campaigning strategy from which they contest for political votes. In Tshwane, for instance, the major political parties – the ANC⁹¹, the DA⁹² and the EFF⁹³ - are in a constant neck-and-neck struggles for the City's political leadership. For wanting to not be associated with the local politics, I continuously explained and re-emphasized my position as a researcher. In the end, I also carried my student card from the University of Pretoria, which I also used as an additional measure to confirm my identity. Although this position as a student was to some a bit misplaced, given my age, many were willing to help out a 'elderly' student complete her PhD.

But I could not evade local politics. As I already state above, the ward councillors, in both Jeffsville and Phomolong, were helpful in helping me gain access to the field. I was however also conscious of being misidentified as their political affiliate. My biggest fear was if the other parties were to mobilize the community against my fieldwork. Anticipating this political hospitality, the ward councillor was gracious enough to always clarify to the community my identity as nothing else but a researcher. With that in mind, wardrobe considerations became one of the mitigating strategies. Lawhon (2020) reflected on field wardrobe concerns from the position of unease informed by feminism. Similarly, Lisiak's (2015) view is that the clothes we choose to wear in the field—and the manner with which we wear them—may help us steer our gendered, classed, and ethnicized performances. My wardrobe considerations, on the other hand, were mainly concerned with avoiding political affiliation. For instance, I purposely tried to avoid clothing items with similar colours to any of the three main political parties. Contrarily, my interactions with city officials were less focused on wardrobe considerations and political affiliation, instead I was more concerned about my professional appearance.

⁹⁰ *Electioneering in South Africa, in areas experiencing poor service delivery, particularly the informal spaces where mainly the black populations reside, where the DA and the ANC are pointing fingers at each other. The DA claims service delivery backlogs are as a result of its corrupt predecessor, and the ANC using the issue of race and status as for poor delivery by the DA*

⁹¹ *ANC.....party colours are green, black and gold*

⁹² *DA.....party colours are dominantly blue with elements of the South African flag*

⁹³ *EFF.....party colours are dominantly red*

*In Jeffsville, for example, a subtle incident of political clash played out. On the first day of my fieldwork, I was taken on walk-about around the settlement by the ward Councillor (who happens to be an ANC representative). We had a chance encounter with ward representative of another major political party in the community. They questioned why I was at the office I explained that I saw the office as a community office ran by the city. They wanted to take me on walk around the settlement. We set an appointment which she did not honour. I am told by the local youth I was *ghosted* [meaning stood up]. I concluded that they were merely trying to stamp their political authority*

Box 3.1: Caught up in Local Political Dynamics (August 2018)

These political concerns were not only exposing the vulnerabilities of political position (Haynes, 2017) as a researcher, they also raised issues of ‘participants’ safety’ (O’Hara & Higgins, 2017: 370). While I encountered ethical questions about the confidentiality with which I addressed with the administering the consent form, I also faced the ethical dilemma of concealing the identity of the participants. Although the settlements are massive formations, some of the people were aware who I interviewed as the interviews were conducted in the participants’ homes. That being the case, I still resolved to use pseudonyms to disguise the identity of participants. Not only would this make them unrecognizable to city officials, ward councillors and participants who would read the research findings, it would also protect the confidentiality of the participants (Cresswell, 1996; Allen and Wiles, 2016; Jenkins et al., 2018). As already indicated interviews were recorded and I assured my participants of the storing of data. This was mainly because it is not uncommon for individuals in certain communities to be attacked as sell-outs⁹⁴ during episodes of political discontent.

⁹⁴ During the apartheid period there were incidents where individuals suspected of being police informants were murdered in mob justice attacks in the townships.

I harbor same view as Allen & Wiles (2016) that allocating pseudonyms to confer anonymity should not be approached merely as a technical exercise. Allen & Wiles argues that choosing pseudonyms should be an interactive process involving participants in choosing their names. [this was in a psychology study]

On the other hand, I argue that the intended use/purpose of the pseudonym in a study has influence on how the naming process unfolds. In my study, for instance, the pseudonyms were for the purpose of anonymity in the thesis report. Meaning, although the research participants were aware that their identity will be protected, they were nonetheless oblivious to the pseudonym conferred to them.

*The naming technique in my study was rather unorthodox. It was mainly influence by wanting to create a memorable link between the data and the respondent. To affect that, I relied on that influenced by the surroundings and other memorable activities linked to the research participants. Take for example the Pseudonym Manichehair*that I linked to one of the female respondents. This was attached to her beautiful and healthy hair, and neatly kept afro-an envy to most African women including myself.*

Box 3.2: What's in the Name

In sum, what is evident is that 'ethical decision making' (Wiles et al., 2008) has implications in how we generate knowledge. Although I concur with the idea that researchers' ethical decision-making is strongly influenced by ethical regulation as argued by Wiles et al. (2008), I believe that the moral and ethical obligation of social researchers need to be debated (Neuman, 2014). For example, as I indicated above, my study abided with the regulations of the ethics committee. I am, however, at the same of the view that our positionality as researchers has strong implications for our ethical decision-making. Hence, providing a reflexive account of my research process can enable others to make sense of the decision taken during the research process. In my case, taking cognizance of the 'methodological reflexivity' (Haynes, 2012) reflexivity helped me not only to crystalize what delineates me as a field researcher, but also to account for 'methodological rigour' (du Toit, 2010) by bringing to the fore the ethical and methodological challenges faced during the research process.

3.5 Chapter conclusion

In sum, this chapter presented a methodological account of my fieldwork in Tshwane. Overall, the discussion outlined the methodological approach underlying this study [Table 3.2 presents a summary of the research methodology for the study], juxtaposing both the planned research design I entered the field with the actual practical experiences in the field. Thus, the discussion reviewed the embedded case study design and its place in producing the data suitable to respond to the research study. In addition, the discussion outlined how the qualitative research method with its flexible attributes enabled the gathering and analysis of that data, to construct a robust and holistic investigation amidst the various challenges in the research environment (Yu et al., 2014).

Element of Research Methodology	Choice
Research design	Embedded case study, with units of analysis
Units of analysis	Informal settlements: Phomolong and Jeffsville
Research approach	Qualitative research
Data techniques	Structured interviews, document analysis, unstructured observations, photo observations,
Analysis strategy	Coding strategy Content analysis Data triangulation
Table 3.2: Summary of Research Methods Source: Author (2021)	

Although the methodological integrity remains an important factor in the design of qualitative studies, including case study, Morse (2011), amongst others, argues that integrity ensures study rigour and enhances the credibility of the field. However, it is equally important to bear in mind the role of the assumptions framing our thinking and their implications not only on the research process, but equally on the research outcomes. To do so, will require that we take a reflexive account of our research field experiences. As I emphasised, those ontological reflections can expose our modes of knowledge production (le Grange, 2010). Wanting to contribute to the growing voices of southern scholarship meant I needed to take these elements to heart. However, in as much as we can draw an intrinsic connection between the production of knowledge (epistemology), the processes of knowledge production (methodology), and the involvement and impact of the knowledge producer or researcher (ontology) as suggested by (Haynes, 2012), this chapter is by no means suggesting that these three elements share a linear relationship. Instead, it recognises the complexities in that relationship.

In closing, there can never be a perfect tool of research inquiry, but this chapter has sought to candidly emphasise and communicate that the research methodology should strive for relevance, meaning it should respond to the unique context of the study and the research environment (Yu et al., 2014). Now that I have delineated the methodological choices which I employ as I take my research questions to Tshwane, I will now move to introducing the case of Tshwane, in the following chapter.

CHAPTER 4

A View from Tshwane's Informal Settlements: Mutations of Urban Governance and Persisting Informality

4.1 Introduction

This chapter presents an overview of the socio-spatial and political context on which the City of Tshwane (CoT) was built. It pays particular attention to the urban governance rationale of the apartheid regime and its framing of the apartheid City. I first provide an account of the name change of the City from the Bakwena to Pretoria to Tshwane. The intention is to demonstrate how Tshwane's current spatial pattern and function along the lines of inequality are intertwined with its historic racially manipulated spatial development trajectories. Borrowing from Rita Barnard (2015), I contend that viewing the present-day city of Pretoria as a continuation of its old form gives a better understanding of its current urban complexities. Considering the city from this perspective also helps foster a renewed lens for an understanding of its spatial politics and evolving political landscape. In keeping with this view, I then highlight the contemporary dynamics, in particular, the polarised urban development dominated by persisting informal land tenure structures. To do so, the chapter briefly portrays apartheid spatial logic, characterised by unequal tenure security structures and organized along racial lines. I start with the 1913 Land Act, to illustrate how the intensity of racial segregation within the apartheid governance rationale continuously evolved to mould the apartheid city spatial pattern.

Following this sketch of events, I then turn to how post-apartheid urban governance attempts to recuperate informality as an object of its 'democratic' urban governance rationale. Here, I look at significant changes in ideological and policy shifts within local government that occurred following the end of apartheid. To do so, I outline the evolution of some of the critical housing governance instruments in South Africa from 1994 to date. I especially focus on the ambitious governance efforts to implement slum intervention programmes, to recuperate in urban settings that remain strongly influenced by apartheid socio-spatial patterns. I argue here that, in the City of Tshwane, this approach has been insufficient for the governance of informality. To unravel those limitations, I unpack the narrative within which the CoT's formalization programme is located. Through the case of Tshwane, I illustrate how discourses on informality are fashioned through space and time. I argue that, in the process, there are limitations in conceptualizing informality in ways that can be recognized as an environmental concern. I close the chapter by looking at the institutionalization of formalization in the CoT. Here, I firstly illustrate how the two main opposition political parties in the City's council are invested in the struggle on ways to delineate formalization as a policy issue to fit their political narratives. I end with a discussion of how bureaucratic issues, in particular, those related to resource allocation posed a challenge to the crystallization of formalization in the City's urban governance.

4.2 From Pretoria to Tshwane, the Transition

The City of Tshwane's name change from its former designation – Pretoria – offers a glimpse into the socio-spatial politics in the contemporary city. These designations unfolded under different political contexts and contestations. The name Pretoria derives from Andries Pretorius, one of the founding fathers of the Voortrekkers and the South African Republic (Zuid Afrikaansche Republiek) during the 1850s. The renaming to Tshwane took place during the post-apartheid period. Nonetheless, in both instances, the renaming of the city was a way for the regime of the day to legitimize its power through territorial control (Giraut & Houssay-Holzschuch, 2016). Since the early 19th century the City of Tshwane underwent numerous power transitions. These power dynamics were not only carried through the renaming of the city but were also reflected through land tenure struggles. As highlighted by Labuschagne (2006), name changing is fundamentally a political activity, given that it involves the redistribution of scarce resources from one group to the other. Hence, following Tshwane's name throughout the history of the settlement is a good entry point for understanding its political dynamics and changing governance.

There are claims⁹⁵ that the original inhabitants of the current Tshwane area were the Bakwena people (Liebenberg, 2015), who were dislodged by the powerful Ndebele ruler king Mzilikazi (Coetzee, 2005; Liebenberg, 2015) in approximately 1833. Despite this inter-group conflict which resulted in power a transition, the Africans enjoyed substantial land tenure rights. But the arrival of the Voortrekkers⁹⁶ around 1840 altered the status quo (Coetzee, 2005; Liebenberg, 2015). The Voortrekkers arrived with a colonial conquest mindset. Their idea was to establish a political centre of governance to cater for the religious and social needs of the Voortrekker community (Liebenberg, 2015). Consequently, in November 1855, the city of Pretoria was established (Coetzee, 2005). The city was named by its founder Marthinus Wessel Pretorius, in honour of his father, Andries Pretorius (Coetzee, 2005). The name Pretoria was one way of legitimizing the Voortrekkers' political power. In 1860 Pretoria was declared the capital of the Zuid-Afrikaansche Republic⁹⁷ (Hatting & Horn, 1991), a status that continued even after the 1910 Union constitution was adopted [see box 4.1]. As the capital of the Union of South Africa, Pretoria cemented its identity as the space of Afrikaner nationalism and power (Barnard, 2015).

The land Acts pursued by the government between 1913 and 1936 'macro scale segregation' (Lemon, 2021). When the apartheid regime came into being in the late 1940s, it reinforced this segregation. Pretoria, similar to many other cities in South Africa, became typical 'apartheid city' (Maylam, 1995; Lemon 2021), a segregated urban setting in which the Black population was relegated to the township. Mamelodi township in Tshwane, for instance, was established in the early 1950s. The township became a temporary or dormitory suburbs for black labour in the 1960s (Ramafamba & Mears, 2012).

⁹⁵ There is a basis for this, since parts of Pretoria East have evidence of early Sotho-Tswana settlements in the form of stone structures [see Pikirayi reference]

⁹⁶ The Voortrekkers or The Great Trek was a movement of Dutch-speaking colonists up into the interior of Southern Africa in search of land where they could establish their own homeland, independent of British rule.

⁹⁷ Zuid-Afrikaansche Republic (ZAR) is a Dutch translation for the Republic of South Africa.

Nonetheless, the Afrikaner nationalist era came to an end in 1994 when South Africa became a democracy. By then, not only had the perception of Pretoria as the capital city of apartheid been deeply entrenched (Coetzee, 2005), the city's unequal land tenure structures along racial lines also reflected the politics of 'colonial conquest'⁹⁸ (Toulmin, 2009). In 2000, after the first democratic local government elections, the African National Congress (ANC) became the government of the city of Pretoria. This was a significant moment signalling the defeat of Voortrekker ideology and power. However, the city's identity as a space of power struggles and contradictions became even more prominent. The name Pretoria remained an area of contention as, to some, it carried perceptions of continued Afrikaner political dominance in the city's spaces and governance. Thus, the ruling ANC pushed to reinforce its political ascendance through the name change from Pretoria to Tshwane. Father Smangaliso Mkatshwa, the former Executive Mayor of the City between 2000 and 2006, argued that: "Changing the name of Pretoria to Tshwane would confirm the demise of oppression and signal the advent of freedom" [News24, March 2005]. Important to note is that the name change to Tshwane also meant that boundaries would have to be demarcated anew. Former black townships that were previously excluded from the Pretoria municipality were now reincorporated. This meant that the new Tshwane became geographically bigger than Pretoria. From this development we can also deduct some explanations to the ANC's ascendance to power in the City.

The name Tshwane derives from a Setswana⁹⁹ word Tshwana, meaning 'we are the same' (Tindall 2000 cited in Coetzee, 2005). However, there are other contradicting claims that Tshwane is derived from the name of a former African chief who arrived in the area some 100 years before the Voortrekkers (Guyot & Seethal, 2005). Nevertheless, Tshwana was made a part of the daily operational discourse as the city moved to adopt the slogan: "Re a Tshwana" which means, " we are the same," to signify unity (Vision 2055:45). This move would not sit well with the opposition parties and other interest groups. Opponents like Labuschagne (2006) largely argued that the name change was distorting the city's founding legacy. These arguments were nonetheless silent on tenure disparities in the city deriving from its unjust legacy. Following many deliberations, in May 2005 Tshwane was finally recognised as the official designation of the city.

Changing the names of cities and towns in South Africa has been one of many democratic processes in the country. The process is coordinated by the National Geographic Council upon application from various cities or towns. The renaming of Pretoria to Tshwane stands out, partly, due to the City's identity as a former apartheid power that enforced tenure inequalities through spatialised racial segregation. Most notably, the name change to the contemporary 'City of Tshwane' sees the City attempting to rebrand itself as a spatially and environmentally 'just' African city. In this context, while the renaming of Pretoria to Tshwane may have achieved particular 'cleansing aims'¹⁰⁰ (Giraut &

⁹⁸ *The land rights sourced under colonial conquest enabled the British to acquire land in eastern and southern Africa for settlement by white farmers. However, land claims based on conquest are subject to contest when political circumstances change (Camilla Toulmin, 2008).*

⁹⁹ *Setswana is one of the 11 official languages in South Africa*

¹⁰⁰ *Cleansing aims at discarding the toponymic imprint inherited from a culture, a language, and/or a previous political order. Cleansing an existing toponymic landscape can be done by erasing place names, renaming, or translating them, and removing them from all official language and legal documents (Giraut & Houssay-Holzschuch, 2016: 9).*

Houssay-Holzschuch, 2016) for the ANC government, it has failed to live up to the expectations of the adjective Tswana, which connotes equality. Land tenure structures in Tswana remain as skewed as they were during the colonial and apartheid era. Like most African capital cities, Tswana continues to be marred by unsustainable urban development.

An understanding of these issues is crucial, particularly given that it highlights the dynamics of pursuing a sustainable city agenda within an apartheid city urban complex. Thus, the next two chapters of this thesis will draw a colourful picture of these intricate dynamics. The aim is to set the contextual groundwork for my subsequent empirical findings.

1652: Dutch Colonisation

The Dutch colonised South Africa

1806: British Colonisation

The country became a colony of Great Britain following the defeat of the Dutch. These colonial settlers altered the land tenure structures in the country.

1910: The Union, the Start of the Afrikaner Rule

The South Africa Act was passed in Britain granting dominion to the White minority over Native. This Act brought the colonies and republics - Cape Colony, Natal, Transvaal and Orange Free State - together as the Union of South Africa. Though the Union of South Africa would remain a British territory, it had home-rule for Afrikaners.

The Union of is the historic predecessor to the present-day Republic of South Africa

The establishment of the Union was to facilitate further segregation (Christopher, 1988).

The City of Pretoria was located in Transvaal, where land tenure rights were available only to White persons (Christopher,1988)

In 1910, the Union of South Africa was created out of the Cape, Natal, Transvaal and Free State. It was to be essentially a white union. Black opposition was inevitable, and the African National Congress (ANC) was founded in 1912 to protest the exclusion of black people from power. In 1921, the South African Communist Party was established at a time of heightened militancy.

1948: The Rise of Apartheid

In 1948, the pro-Afrikaner National Party (NP) came to power with the ideology of apartheid, an even more rigorous and authoritarian approach than the previous segregationist policies. While white South Africa was cementing its power, black opposition politics were evolving. In 1943, a younger, more determined political grouping came to the fore with the launch of the ANC Youth League, a development, which was to foster the leadership of people such as Nelson Rolihlahla Mandela, Oliver Tambo and Walter Sisulu.

1994: Democracy

Box 4.1: Colonization and Apartheid History in South Africa

4.3 Apartheid urban policies and the apartheid city

To relate to the exclusionary and unequal spatial structuring in the contemporary City of Tshwane, it is pertinent to appreciate the influence of the abhorrent apartheid governance logic on South African urban spaces. Cities in contemporary South Africa are spatially structured into racially organised enclaves – the suburbs¹⁰¹, the townships¹⁰² or locations and informal settlements. This spatial presentation is a manifestation of the apartheid regime's policies, deliberately designed to enforce racial segregation. The Native Land Act of 1913 is arguably the foundation for these persisting spatial inequalities and the racial segregation observed in South African urban spaces. The Act facilitated land dispossession from the black majority, stripping them of land tenure security. The state's subsequent introduction of other apartheid policies such as the Native Urban Areas Act of 1923 and the Group Areas Act of 1950, was arguably to reinforce the 1913 Land Act. Cumulatively these urban governance tools became useful for the socio-spatial-political control of the black population.

By the 1950s the South African urban landscape had been transformed into an apartheid city [see figure 4. 1], a racially segregated urban development where African areas were pushed to the periphery (Lemon, 1991). Tenure deprivation for the African population became a pivotal feature of the apartheid city. I will show here how informal tenure consequently became the primary means for many Africans to reclaim access to the apartheid city. This section therefore outlines how cities like Tshwane epitomise these land tenure politics generated by the apartheid ideology. In Tshwane, not only did the superimposed apartheid policies manifest into 'unjust' spatial urban development with outbreaks of informality, but the ramifications of the apartheid policies also became a conduit for locating the 'politics of otherness'.

¹⁰¹ In apartheid South Africa, suburbs were classified as whites-only areas.

¹⁰² Townships and locations were native areas.

4.3.1 1913 to 1951 Urban Policies: Land dispossession and tenure deprivation

Land tenure deprivation for the Black people in South Africa can be traced back to the country's era of colonial rule. Before the colonial rule, the majority of the black South Africans had land ownership. These land tenure structures would change following the government's interventions of facilitating the dispossession of land from scores of black¹⁰³ South Africans. The Native Land Act of 1913 was a crucial instrument in the facilitation of land dispossession (Modise & Mtshiselwa, 2013). This Act institutionalised a system where the state could restrict land allocation to the black South African to the reserve areas¹⁰⁴. In this regard, the government allocated only 7% of the country's land to this grouping (RSA, 1913). The displacements resulting from land dispossession would mark the beginning of tenure inequalities in South Africa.

By the 1920s, the segregation policies had shifted their focus to urban areas. The state instituted the 1923 Urban Areas Act in this regard. The objective behind creating racially segregated urban living spaces was setting the scene for the apartheid ideology – introduced in the 1950s. The Urban Areas Act approached urban segregation at national and local scales by instituting influx control measures, to regulate who could live and work in urban areas (Maylam, 1995). This confined many black people to the predominately rural reserve areas. In this way, the 1923 Act was advancing the 1913 Land Act. At the local scale, the 1923 Act introduced urban residential segregation by enabling restructuring of the urban living environments into white areas (suburbs) and black areas, known as locations at the periphery of cities. That was the birth of the segregated city [see figure 4.1], which set the tone for the contemporary apartheid-city [see figure 4.1]. In the segregated city, land tenure had begun to be limited for Africans. Prior to this Act, both the poor black and white people cohabited in racially mixed settlements. Thus, the 1923 Act facilitated the 'creation of white privilege' (Parnell, 1993), not only in an economic sense but also in passing the burden of informal living environments to generations of poor black people.

¹⁰³ Black in this context includes the African, the Coloured and the Indian people.

¹⁰⁴ Reserve areas were native areas.

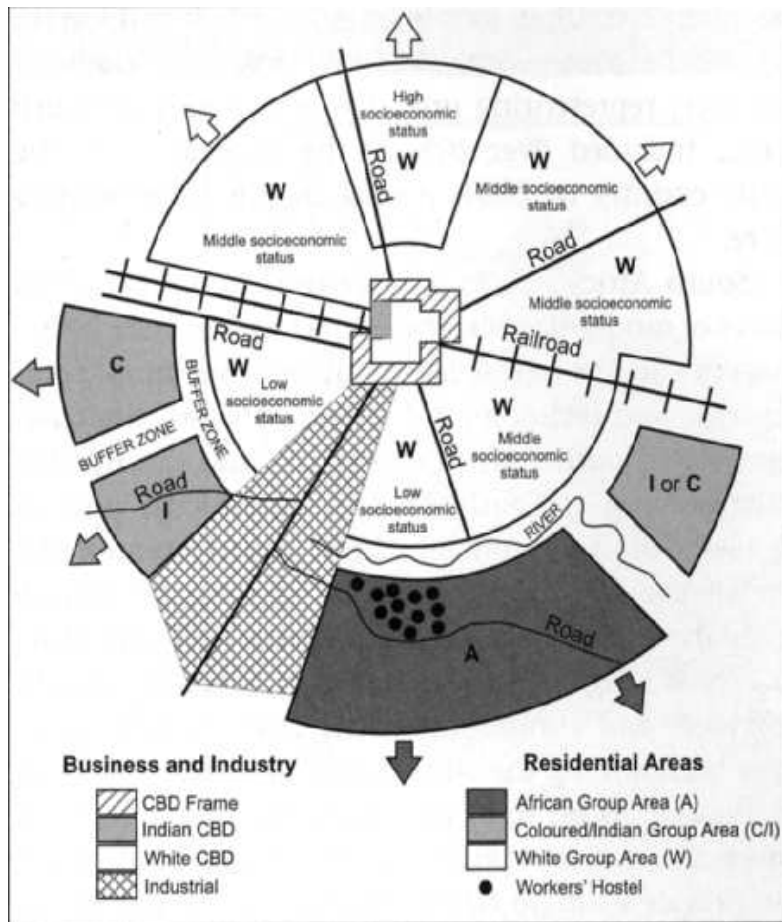


Figure 4.1: The Apartheid City
Source: Adapted from Simon (1989)

To further suppress urban influx, the 1936 Natives' Trust and Act was enacted to increase black land ownership in the reserves from 8.7 % to 13%. The idea was that many black people would work and live in the reserve areas rather than in urban areas. However, the Act was only able to contain urban influx for about a decade. By 1946 the Act had been undermined by rapid industrialisation coupled with a decline in the rural economy. This industrialization was also linked to the wartime¹⁰⁵ economy. This was a period of booming in the manufacturing and mining sectors (G. E. Schneider, 2000) when, consequently, cities were facing urbanisation. Thus, the racially motivated social restrictions stopped making economic sense for white capital, given the link between industrialisation and urbanisation (Maylam,1995). With policy recommendations from the Fagan Commission of 1946, the government relaxed its influx control measures and introduced reforms to effect controlled urbanisation. To ensure a continuous supply of cheap labour, while at the same time controlling and policing the movement of

¹⁰⁵ World War II had a huge social and economic effect on South Africa. Gold and mining remained the biggest industry in the country, but manufacturing had begun to expand significantly as a result of the war and the need for various supplies. The number of people employed in the manufacturing industry, especially Black men and White women increased by 60% between 1939 and 1945. [<https://www.sahistory.org.za/article/second-world-war-and-its-impact-1939-1948>]

the Black South Africans (Savage, 1986), the government introduced the 1952 Pass Laws Act. The Act insisted that Black people over the age of 16 had to carry a passbook (the dompass) [see figure 4.2].

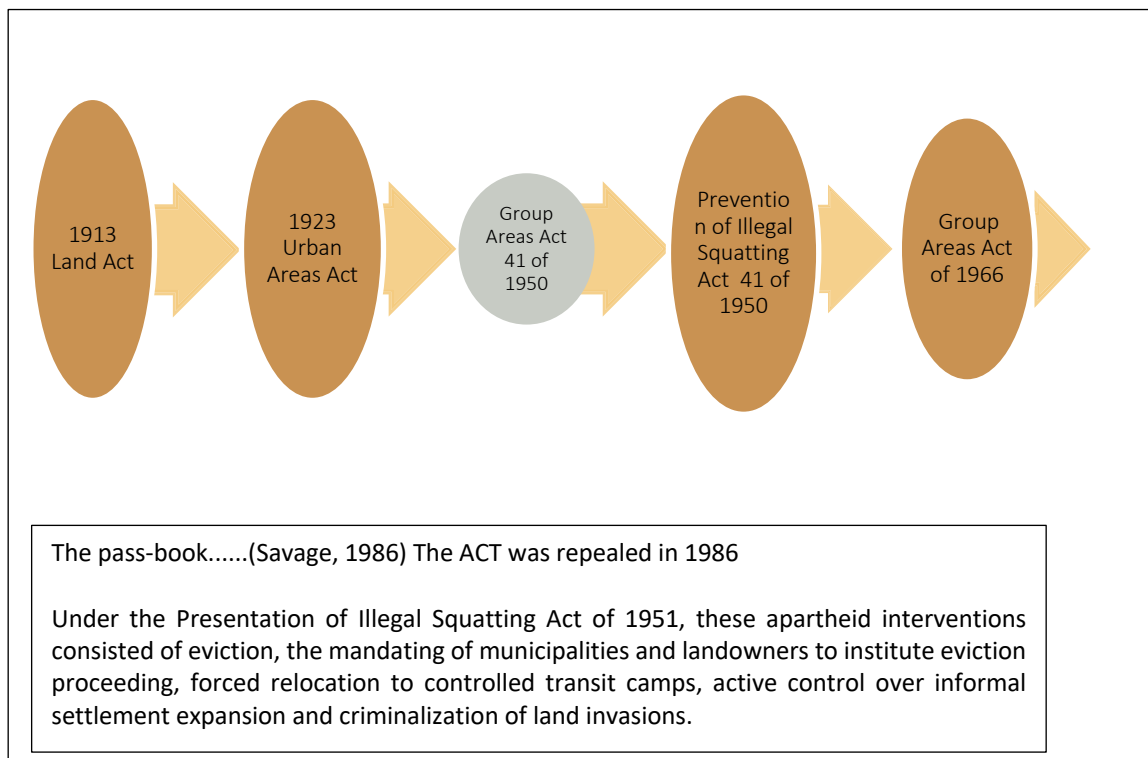


Figure 4.2: Influx Control a Common Thread
Source : Author (2019)

Nonetheless, in post 1994 for the first time since the 1913 Land Act, black people were given some right to the city. Although they were to be allowed to work and stay in urban areas, the city remained hostile and exclusionary towards black people, as many relied on informal tenure (Crankshaw, 1993). This development was, however, short-lived. The rise of the National Party to power in 1948 saw the institutionalisation of the apartheid ideology. Consequently, not only were the Fagan recommendations reversed, but also, two notable pieces of legislation were immediately introduced. The first was the Group Areas Act 41 of 1950, which prescribed where different population groups could own property. The second was the Prevention of Illegal Squatting Act of 1951, which was aimed at preventing the unlawful occupation of land or buildings. These measures highlighted the fact that black urban citizenship was not to be tolerated not even through informal tenure. Black people were only granted conditional tenure to work as cheap labour in the cities, to advance the material interest needs of white capital (Harrison, 1992) and build an apartheid city in which white people had unconditional tenure. The housing policy enforced these tenure disparities by ensuring that minimal housing stock was provided for black people. This reflects the balance of power underlying governance instruments (Zevallos, 2011). In this context, the state was using the housing policy to manipulate the urban spatial structuring.

4.3.2 1966-1991: Housing politics, shaping of tenure structures and setting up the of the apartheid city

The housing tenure shortage in urban South Africa was a manifestation of the land tenure deprivation. Between 1948 and 1962, the state addressed the housing problem with a mass housing rollout to establish townships like Soweto¹⁰⁶. This was pushing black citizenship further towards the fringes of the cities. However, to those in power, the locations or townships were revealing an unwelcomed growth trend – they were attracting black urban migration. Thus, the government needed more authority to curb this unlawful trend in urbanisation. Hence, between 1950 and 1966, the Group Areas Act of 1950 underwent numerous amendments to meet this need.

The 1966 version of the Group Areas Act brought about a significant shift in the transformation of tenure structures in urban South Africa. The Act was influential in advancing the white cities project, meaning it not only obstructed black people from living in cities (Mbembé, 2004), but also stripped them of their land tenure. Under the Act, forced relocations and land dispossession intensified. Some of the vibrant black areas, like Lady Selbourne and Bantule in former city of Pretoria, in the heart of the urban areas were demolished to make way for the advancement of the white city [see figure 4. 3]. As a result, thousands were forcefully relocated to the newly established townships and the Bantustans (van Wyk, 2012). Even so, black presence in urban areas was only in the form of temporary sojourners and contract workers (van Wyk, 2012). This further reinforced the ideals of the apartheid city in which urban citizenship was shaped through land tenure manipulations. Housing policy played an enabling role for enforcing these repressive urban politics. By 1967, the government reintroduced a housing freeze to curb the influx into the locations further (Harrison, 1992). This resulted in an unprecedented housing tenure pressure on townships (Huchzermeyer, 2002). Consequently, townships became spaces of marginalisation burdened by informality and poor living environments. The 1970s brought shift in housing politics. The apartheid policies were consciously striving to create migrant labour, as a result, new townships were built (Lemon, 2021). This policy shift was necessitated by the unfolding housing crisis which was further aggravated by the rapid urbanization at that time (Harrison, 1992).

These contested land politics forcefully imprinted on urban areas in contemporary South Africa. The current spatial transformation of prevalent informal tenure gives a differentiated understanding of this influence. At that stage during apartheid, approximately 13,5% of the population (1,06 million) lived in informal tenure, mostly in free-standing squatter settlements on the urban periphery and also in the backyards of formal houses (RSA, 1994a). South Africa is 26 years into democratic rule, yet the tenure structures are still skewed and the figures have multiplied. A 2013 report by Africa-Check¹⁰⁷, compiled from data sourced from Statistics SA, estimated that out of 55 million South Africans 5,4 million live in informal settlements. According to this report, the majority, about 5,1 million (94,44%) of the country's informal dwellers are Black people. The white population constitutes less than 1% of the 5,4 million

¹⁰⁶ Soweto is a populous black township in the southern parts of Johannesburg.

¹⁰⁷ Africa Check is a non-profit organisation, headquartered in South Africa as a non-profit trust. Founded in London in 2012 as a Community Interest Company, control of the organisation passed to the South Africa-registered trust at the start of 2019.

informal dwellers accounted for (<https://africacheck.org/reports/do-400-000-whites-live-in-squatter-camps-in-south-africa-the-answer-is-no/>). From this, we can draw that, for some reason, not only do tenure struggles remain racially spatialized, but there is also a continuation of the regulation of how marginalised groups use space (Yoltay, 2019). Thus, the objective of removing the burden of informal life from the urban experiences of poor white people since the adoption of the 1923 Urban Areas Act has been successful.

4. 3.3 Tenure system and the politics of otherness in Tshwane

The urban development in the City of Tshwane (CoT) magnifies the national trend of unequal dual tenure systems. The city of Pretoria (the current CoT) was founded on principles that manipulated the land tenure systems to restrict black tenure. In 1857-1859 the City Council commissioned the surveying of Pretoria by AF du Toit (Peacock, 1955), an exercise that made no provision for Native neighbourhoods. In 1867 there were some shifts in tenure structures as the city's law recognised Coloured¹⁰⁸ people as tenure holders. The city set aside about 12 plots of land for the Coloured community. The Africans, even though in the majority¹⁰⁹, were however excluded in this process. The common practice was to accommodate black people, sometimes with their whole families, on the property of the white employer. As a result, by 1875, the city had no provisions for separate neighbourhoods for white and black people. It was only in August 1888 that the city mandated the surveying of a piece of land west of Schoolplaats to accommodate the Africans (Peacock, 1955). This new area became Marabastad, the first native neighbourhood of Pretoria, comprised of 67 plots of land. Nonetheless, the presence of the Africans in the city remained minuscule and controlled.

The rise of the wartime economy put Pretoria amongst the 20th century industrialising cities in the country. Consequently, the city was now faced with unavoidable urbanisation as black people were conditionally being allowed into Pretoria, to serve the white economy (see Harrison, 1992:15). But the growing presence of Black people became a thorn in the side to both the authorities and the white residents. There was a general belief that the city was no place for an unemployed black person. By 1906, prior to the 1913 Native Land Act, the Pretoria City Council resolved to relocate black people not accommodated by their employers to the townships. The city enacted this spatial control measure by acquiring a piece of land to establish freehold areas, like Lady Selborne, for the Africans (Lemon, 1991). In the South African context, freehold is a tenure right which issues a title deed to property owners (NUSP, 2015). But the establishment of the freehold areas was creating an unsustainable dual tenure system, considering that the freehold areas were on the fringes of the city, far from economic activity and work opportunities [see figure 4. 4]. On the contrary, this was driving black job seekers into white areas. For the white residents, the presence of "surplus" black people was regarded as a disgrace and a cause of overcrowding in the streets, with negative implications on their property values (Council regulation 1.1.1906, notes 57.60). The presence of the 'black body'¹¹⁰ (Nunnally, 2018) in the city was raising the 'politics of otherness'. Yoltay (2019) likens politics of otherness to the social identification used by those with a sense of superiority to categorise others as inferior subjects. The establishment of the freehold areas in the city was to contain this otherness.

¹⁰⁸ Coloured is the apartheid era racial classification to define racially mixed persons

¹⁰⁹ Racial classifications in South Africa: (Statistics South Africa, 2020)

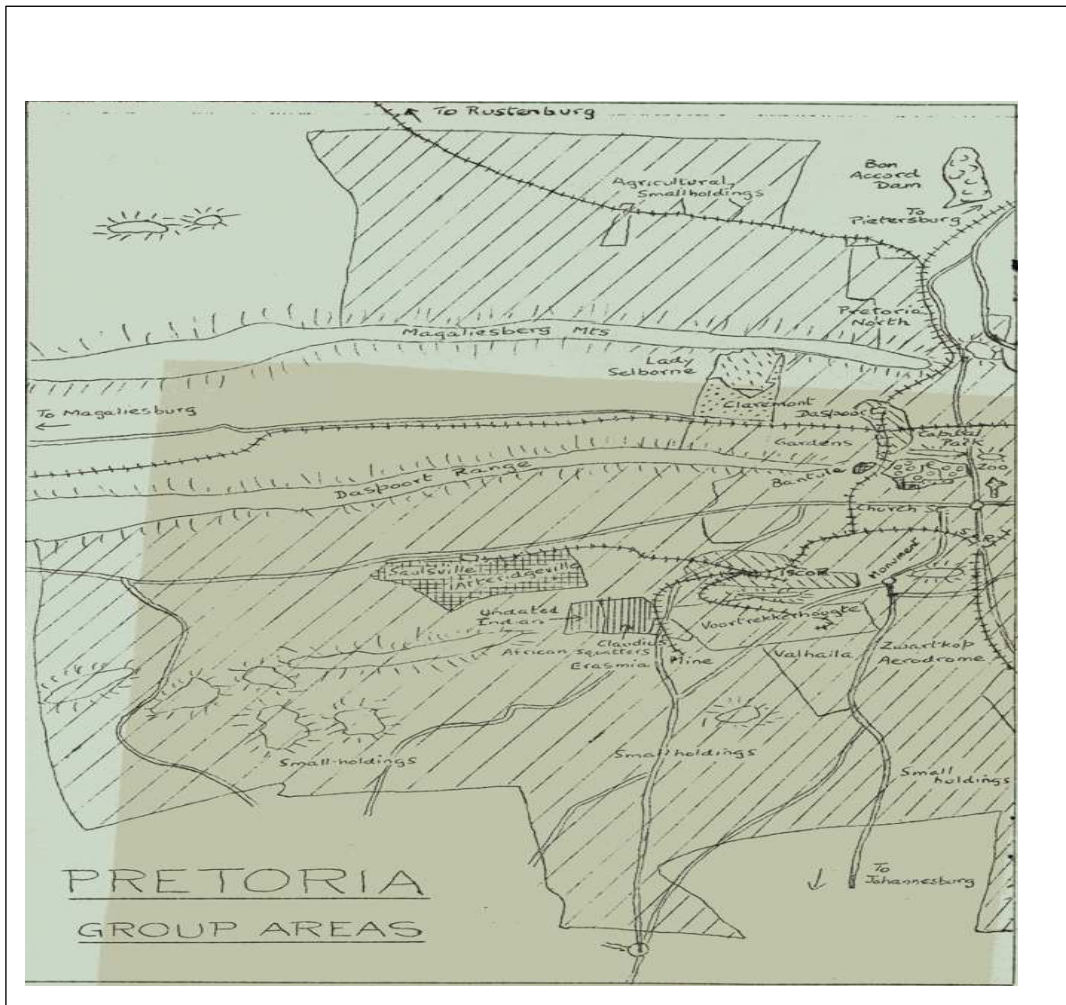
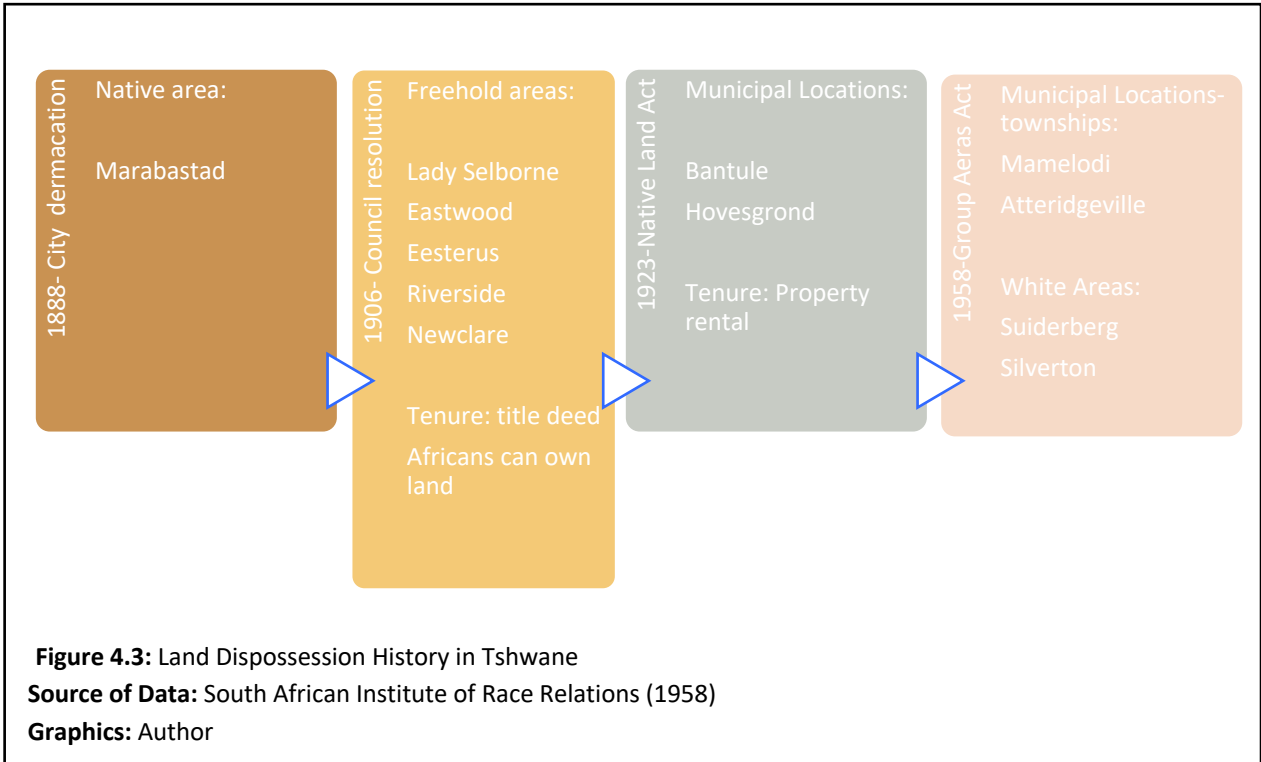
Blacks: African: 80,8%, Indian: 2,6%, Coloured: 8,8%

White: 7, 8%

¹¹⁰ Nunnally (2018) uses the concept of Black Body to depict how racial ideas in historical discourses, public policies, and vast contexts, over time, influence the experiences of black people.

The city's intention with the freehold areas was not to secure tenure. These freehold areas mainly served as a measure to contain black urbanisation. The state exploited housing provision as a tool to advance this spatial control (Maylam, 1990). Accordingly, the city was not producing adequate housing in freehold areas. By 1950 there were only 1500 houses allocated for the 140 000 native population, with as many as 32 people sharing a single house at times (Pretoria Joint Council of Europeans and Non-European Affairs, 25 May 1950). Because housing delivery was not at par with this growth, many turned to informal tenure. So, backyard dwelling and squatting were expanded in the cities, including Tshwane.

At some stage, the city intervened in the shortage of housing tenure for the Africans. The housing delivery strategy of the city was nevertheless advancing, albeit not in similar spirit. This was what Yoltay (2019) terms 'spatial assemblies of otherness', which she frames as spaces of counter representations for socializing and organizing are produced in locations close to resistance spaces. The city achieved this through the establishment of municipal townships for black people based on the rental housing scheme. Municipal rental areas, however offered a lower sense of tenure security compared to the freehold areas (ref). However, the enacting of the 1950 Group Areas Act revealed that under the apartheid regime security of tenure for black people was nothing more than an illusion. This revelation contradicts de Soto's (1993) argument that a title deed strengthens tenure security. For example, the city demolished the freehold areas, and the Africans were forcefully relocated to the locations to make way for the white suburbs [see figure 4 .3]. Townships such as Mamelodi and Atteridgeville became places for accommodating large numbers of the African population (Hattingh & Horn, 1991). Housing shortages continued in the townships inducing informality as an alternative tenure for those deprived of land and formal housing. This spatial restructuring not only facilitated further land dispossession from the black people, but it also perpetuated the politics of otherness by burdening black communities with informality. However, dominant narratives on housing pursue an agenda that frames perceptions about the informal tenure system as an illegal and undesirable subculture. In Tshwane, I argue, the dual tenure system was raising such politics of otherness.



In April 1994 South Africa became a democratic state following an outright majority election victory by the African National Congress (ANC) and South African Communist Party (SACP) alliance. The majority of black South Africans voted in favour of the ANC, as they could relate to its ideals as a liberation political movement. One of the expectations of this democracy, by the African voter in particular, was for the government to completely abolish the apartheid system, especially the tenure deprivations that shaped the apartheid city. Thus, post-1994 most of the apartheid laws were repealed by the new democratic government. This period marked a key turning point in the context of South African politics. While securing political power was almost immediate for the black South Africans, securing land tenure and housing tenure was a slow process. The democratic regime made some inroads in addressing housing shortages through interventions such as mass housing programmes (Turok & Scheba, 2019), yet informal tenure still dominates urban development. The aggressive post-apartheid formation of informality was overshadowing this development. Huchzermeyer et al. (2004) reported that in 2004, 10 years into democracy, 18-23% of households in South Africa's six largest cities lived in informal settlements. Consequently, urban development in cities like Tshwane continues to emulate the apartheid city project in practice, if not in terms of ideology.

In this section I attempted to demonstrate how the apartheid regime manipulated land tenure to advance its racially motivated politics, resulting in an urban development constituted by a dual tenure system - informal and formal tenure. I particularly argued that the apartheid spatial planning frames its rationale through the negative description of the surplus urban black people as its mode of exercising power. In the next section, I unpack ways in which, in this system, the burden of informal tenure is relegated to the black people s through the status quo of informality in the contemporary City of Tshwane.

4.4 From 1888 to 2018: 130 years of depoliticised tenure deprivation

From Pretoria to Tshwane, informal spaces have become a constant fixture in the City of Tshwane's (CoT) politics of governance. As the previous section illustrated, shack dwellings in the CoT can be traced back to the late 1800s when the urban poor, mainly black, were scrambling for tenure security (see Peacock, 1955). Till now, the city has relentlessly restricted tenure of the Africans to the so-called native villages - the freeholds and locations - with limited land allocations. Thus, the native villages are marred by massive housing shortages, dominated by informal tenure and poor service infrastructure. Most notably, these spaces became areas with poor living environments characterised by disorderliness and vulnerability. For instance, informal spaces in the city display a dense spatial pattern, characterised by poor access to housing and basic infrastructure such as water, sanitation and waste management services

In 2018, almost 130 years on, while a lot has changed for others many others nothing much has shifted. Informality in the post-apartheid CoT settlements epitomises the continued tenure struggles of the urban poor black population. In South African cities, informal tenure is generally secured through land invasion, which is outside of the conventional urban planning processes (Huchzermeyer, 2021). As a result, the CoT's conception of informality is reduced to a legalised interpretation with little consideration of the historic tenure deprivations. I argue that, in a way, this conceptualization of informality undermines the vulnerabilities experienced by those living in informal spaces. Furthermore, these interpretations feed misperceptions about informal settlements, which sustains the politics of otherness. As noted by Stemela (2004), the narrow perceptions and interpretations among the dominant classes may influence the state to act in the interest of those groups. Consequently, these acts of proxy by the government may affect the context from which interventions to informality are approached in city governance.

4.4.1 Depoliticizing land invasion and informality

The City of Tshwane has seen fair amounts of informal settlements as part of its urban governance but, still lacks a distinct position on what defines the informality of its informal settlements. The City outlines the definition of informal settlements in its governance instruments, such as the by-law on informality and the Sustainable Human Settlements Plan (SHSP)¹¹¹. However, the perceptions of informality emerging from those propositions frame informality in legalistic terms. The conception of informality in this current form does not appreciate the influence of the entrenched land deprivation history in the City. The Upgrading of Informal Settlements Programme (UISP)¹¹² has been setting the national agenda on informal settlements policy since 2004. Thus, to some extent, the UISP lays a path from which the general definition of informal settlements derives. For the UISP (2004) an informal settlement is defined as any settlement displaying one or more of the following characteristics:

- *Illegality and informality,*
- *inappropriate locations,*
- *restricted public and private sector investment,*
- *poverty and vulnerability,*
- *and social stress.*

However, the definition presented by the UISP remains broad and open to interpretations with a potential for inconsistencies. In Tshwane, for instance, the description of informal settlements highlights the inconsistencies in City's overall formalization objective.

The definition of informal settlements drawn from the City's Informal Settlements by-law places a focus on housing tenure by invoking the nature of the top structure:

"One shack or more constructed on land, with or without the consent of the owner of the land or the person in charge of the land" [CoT informal settlement by-laws, p: 2]

Framing informality as merely a housing and land tenure issue is problematic in two ways. Firstly, as I illustrate later in the chapter, this influences how formalization is approached as less of an environmental concern. Secondly, it contradicts the CoT's formalization objective, which in line with UISP, recognises a settlement as formal regardless of the nature of the top structure. On the contrary, the definition presented by the SHSP captures the understanding of informality in ways that reflect the UISP's objectives. The SHSP's interpretation of informal settlements centres around the land tenure reform. For instance, the SHSP state that for settlements to be classified as formal they have to comply with the approved surveyor-general plan¹¹³, this also implies that services take-over by the City of

¹¹¹ SHSP (Sustainable Human Settlements Plan) is a housing chapter of the Integrated Development Planning (IDP).

¹¹² UISP (Upgrading of Informal Settlements Programme) is a national housing policy programme that seeks to upgrade the living conditions of millions of poor people by providing secure tenure and access to basic services and housing.

¹¹³ Surveyor General (SG) Plan: can be understood as a plan which, represents the relative positions and dimensions of two or more pieces of land. This plan then needs to be enforced, has been signed by a person recognized under any law then in force as a land surveyor, or which has been approved or certified as a general plan by a Surveyor General.

Tshwane has been confirmed. Based on this, all human settlement structures located on land which does not comply with the above criteria have been counted and included in the informal category (City of Tshwane, 2013b, p. 40).

Thus, the SHSP's understanding not only shifts the by-law's fixation on housing tenure as a representation of informality, it also introduces land tenure reform to the debate by placing a focus on the surveyor general plan (SG plan) as a determining factor of informality. This approach of interpreting informality on the basis of the SG plan seems to also discount the by-law's conception of an informal settlement as an illegal entity on the grounds of being constructed on land with or without permission.

The CoT's legalistic conception of informality can also be traced to its adoption of the term 'authorised informal settlements'. In the by-law on informal settlements, the City presents authorised informal settlements as:

"Any informal settlement which is recognised by the Municipality as an authorised informal settlement and which will be legalised and upgraded as a formal township in terms of the Municipality's existing housing policies" [CoT informal settlement by-laws,p: 2].

Based on the definition of informal settlement above, one can potentially argue that any authorised informal settlements now technically meet the legal criteria of the City. However, this understanding is in tension with that of the SG Plan. Some of the authorised settlements in the City are stuck in that status due to land politics. For example, settlements like Jeffsville [detailed discussions in chapter 5 and 6] are recognised as authorised, yet the CoT's land politics, past and present, retain such settlements in the illegal status. One of the setbacks with these settlements is that they lack an approved SG plan. Thus, with reference to the UISP's understanding of formalization, implies that settlements like Jeffsville remain as illegal.

Though the CoT seems to pursue this legalistic conception of informality, I argue that the Informal Settlements by-law's emphasis on 'with or without consent', to an extent, seems to suggest that the establishment of informal settlements, is at times, consented by the authorities. This interpretation calls for a broadened definition of informal settlements in a way that aids the 'consented' informal settlements typologies to find expression in the conception of informality. Examples of such informal settlements in the CoT include Phomolong, Marikana, Spookpark and Masholeville [see figure 4. 5 and 4.6]. These informal settlements could be classified as consented as they were established more often as a by-product of the City's intervention processes such as formalization [full discussions chapter six]. Conflating the 'consented' with the 'unconsented' informal settlement formations underplays the contribution of governance decisions in the creation of informality. This distinction is significant when challenging the City's problematizing of informal settlements. What is concerning about these problematizations are, at times, the unwarranted perceptions about informal settlements as an illegal, one-way and irrational decision by the poor.

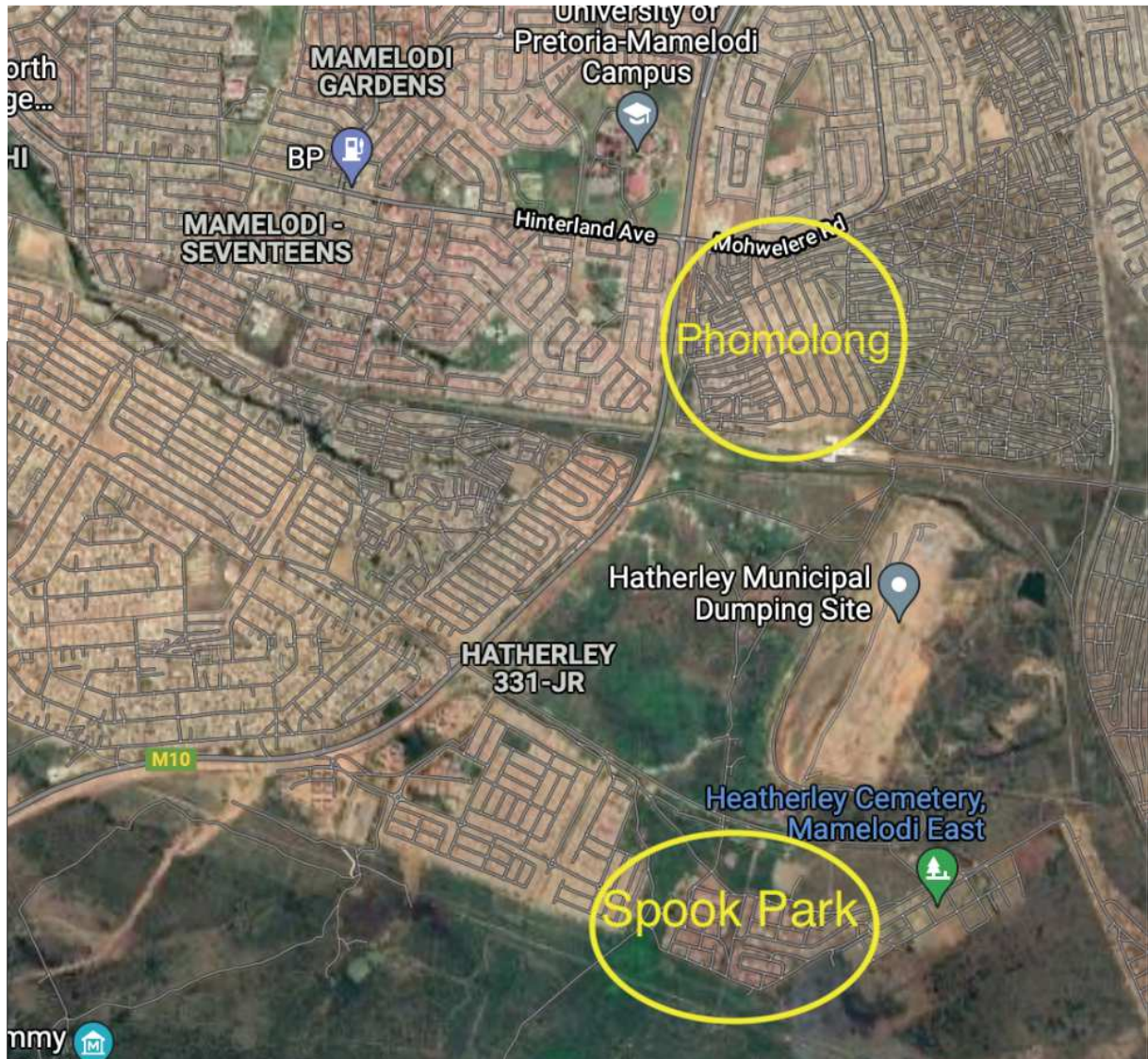


Figure 4.5: Map of Phomolong & Spookpark
Source: Google Maps (accessed 10 October 2021)



Figure 4.6: Map of Jeffsville & Mashollaville
Source: Google Maps (accessed, 10 October 2021)

What is evident is that the CoT's conception of informality should shift from its legalistic perspective to reflect the City's challenges with the deficit in land for urban housing. A majority of informal settlements in the CoT are without an SG plan considering they were formed through land invasion. The CoT defines land invasion as:

"The illegal occupation of land or any settlement or occupation of people on land without the express or tacit consent of the owner of the land or the person in charge of the land, or without any other right in law to settle on or occupy such land" [CoT Bylaw on informality, p:3]

The City's emphasis on illegal occupation as a defining factor for informality is in tension with the people's understanding. I draw from De Soto (1989) to argue that *"informality is a creative response to the state's incapacity to satisfy the basic needs of the impoverished masses"* (p: 14). Thus, those seeking tenure through land invasion regard their actions as a justifiable action of claiming land tenure in the absence of a responsive state. As noted by a community activist in Phomolong informal settlement:

"Our people are desperate, so when they see a piece of land, they occupy it" [Interview: Community activist*, July 2018]

To an extent, the state has also been turning a blind eye to these developments (Hattingh & Horn, 1991), an indication that it concedes to being unresponsive to the tenure needs of the people. In this context, the state's interpretation of informality as an unlawful act is misplaced as it neglects to account for the historical land tenure deprivation adequately. Instead, it serves to advance the politics of otherness by downplaying the vulnerability of the informal dweller. As my empirical analysis shows, this attitude plays a fundamental role in governance shaping the environmental focus of processes directed at addressing informality.

4.4.2 Informal settlements trends in contemporary Tshwane

The discussion above emphasised the importance of considering informality not merely as a flawed human action, but as lived experiences shaped by the spatially entrenched racism that continues to influence the overall spatial and environmental ordering in the present-day City of Tshwane. As Bourdieu (Bourdieu, 2005) reminds us through the concept of the Habitus, the conduct of actors in the process of resolving a problem is influenced by numerous underlying socio-economic factors. Similarly, as already argued, for those seeking tenure in informal settlements, their decision is influenced by their deprivation of land tenure. In Tshwane, like other cities in the Gauteng province, informal settlements are a growing phenomenon. The estimated number of informal settlements in the CoT in 2013 were 178 informal settlements in the City (City of Tshwane, 2013b).

The CoT is geographically arranged into seven regions¹¹⁴ [see figure 4. 5]. There are traces of informal settlements across the City, though unevenly distributed, reflecting a historical-political context of each region. A high concentration of settlements is in regions where some of the largest black townships in the City are located. A majority of the informal settlements (66%), were concentrated in the Regions 1, 2 and 6 (City of Tshwane, 2013b). Regions 3 and 4 accommodate the second-largest share of informal settlements at 28%. The smallest concentration, at 6%, of the City's informal settlements, are located in regions 5 and 7. However, this regional settlement spread does not reflect regional informal settlements' population density. For instance, although Region 2 showed the largest concentration of informal settlements, it was less dense in comparison to regions 1 and 6, respectively. There were fewer informal structures in Region 2 (City of Tshwane, 2013b).

¹¹⁴ *The City of Tshwane regions. The regions are used for both administrative (Vision 2055), but also political purposes .*

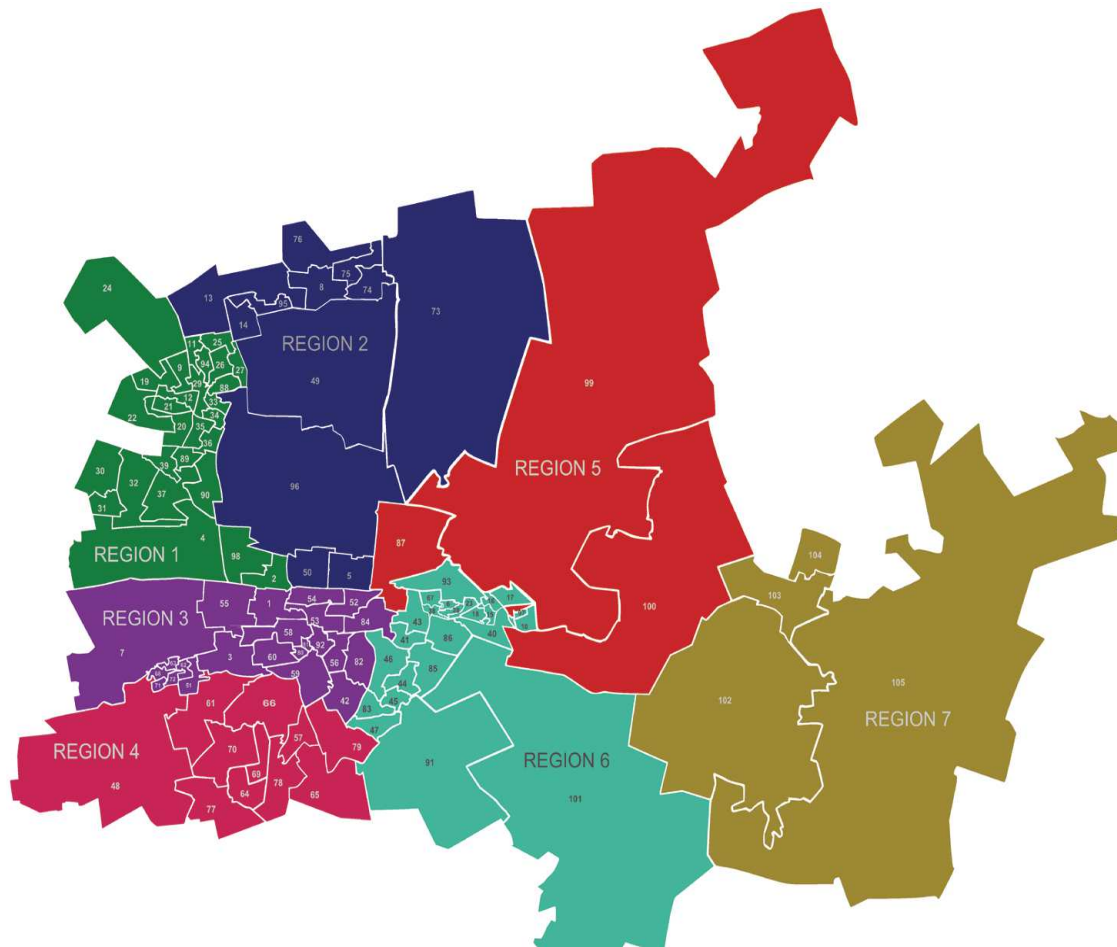


Figure 4.7: City of Tshwane 7 Administrative Regions, 2011
Source: City of Tshwane (accessed August, 2020)

This uneven regional distribution of settlements reveals the persisting politics of land in the City of Tshwane. More than three decades after the abolishment of influx control apartheid laws, the trend of informal settlements formation on the outskirts of the city lingers. This spatial segregation continues even though there are some privately-owned pieces of unbuilt land in some of the City's upmarket suburbs close to economic activities and opportunities. With some political will from the city, this land could have been acquired to facilitate the social integration ideals envisaged by the democratic state. Instead, what we see, for example in region 6, is that some of this privately-owned land remains under white ownership and is currently developed into commercial centres like Castle Gate and Menlyn-Maine developments; and an Afrikaans¹¹⁵ only private University [see figure 4.3, area 2]. Interesting to note is that while the formation of informal settlements usually happens through land occupation, these

¹¹⁵ Afrikaans is one of the languages spoken in South Africa. The language is associated with oppressive system of apartheid. Thus, post-apartheid there is controversy with Afrikaans as a medium of instruction in some South African institutions of learning. I am not arguing that the Afrikaans language should not have space of expression.

private land parcels remained untouched. This abstinence from invasion could be in part be due to fear of potential eviction, which is most probable on private land as result of legal action instituted by private landowners. According to NUSP (2015), eviction is one of the elements threatening the tenure security of informal dwellers.

I argue that this selective land invasion has influenced the growth pattern of the City's informal settlements. Between 2013 and 2017, the growth rate of informal settlements in Tshwane has been relatively static. According to SHSP, the city had 178 informal settlements, while in 2017 there 170 (Tshwane, 2017) in Tshwane. Instead, existing settlements are growing denser with fewer new settlements emerging. For some reason, people find themselves moving into existing and populated settlements. As commented by a ward councillor in one informal settlement, where new shacks spring up within existing settlements frequently:

"When you wake up you find new shacks erected"[Interview Councillor Jeffsville, July 2018]

Though some of the informal dwellers have also alluded to this density growth emanating from frequent inward migration, they have nonetheless also highlighted family dynamics as another social factor contributing to this densification. Some of the informal dwellers like Macheckers* and Mafifa* commented that as their children are coming of age, there is a need to create additional space to preserve dignity and privacy. Hence the tendency to erect extra shacks within their yards, with implications on the growth in settlement size.

It would, however, be disingenuous not to acknowledge that economic factors also contribute to this densification trend. A ward councillor for the Phomolong informal settlement comments that:

"Some rent out their own spaces to generate income. Hence their stands are full. When the people arrived here from Marikana, they were packed [sic allocated stands], but they are the ones who started renting out their spaces hence this problem" [Interview Maja:July 2018].

The contribution of 'bomastandi'¹¹⁶ to the informal housing market is not a new concept in urban South Africa. In Tshwane, this can be traced back to the early 19th century when the City was urbanising, and housing access was not extended to the Black people (See Peacock, 1955). Many turned to informal tenure alternatives like renting backyard dwellings. Though such informal practice continues to offer an entry point in the contemporary CoT, renting out informal settlements has also become a housing trend to gain access to the City (Gunter, 2014). In this way, barriers to having a right to the city, which the apartheid urban polices were seeking to maintain, have been dismantled, leading to spiralling spatial growth.

¹¹⁶ Bomastandi is a Zulu informal phrase used to reference the landlords. They have been offering alternative accommodation to many including migrant workers and those seeking affordable accommodation.

This unpredictable growth trend makes the City's informal settlements a moving target. This randomness, in turn, might be one of the reasons the CoT cannot maintain accurate statistics on the population figures in its informal settlements. The CoT does, however, make some efforts to maintain population records in its informal settlements, but these do not seem to be adequate. For instance, shack marking processes are undertaken, though they are not frequently carried out. According to the ward councillor [Interview: July 2018], the last shack count conducted in Phomolong was around 2012. Beyond this occasional shack counting the CoT lacks the capacity to monitor growth developments, hence the City is, to some extent, also overwhelmed by this growth trend.

The growth of informal spaces can be seen as a victory in dismantling the restrictive apartheid laws. But the dense spatial pattern in informal settlements captures the persisting racialised tenure struggles of the City's black African population. In 2018 the City accounted for (number) informal settlements. Most, if not all, of the City's informal dwellers are black people. Informal settlements for white people are extremely rare in the CoT. There are some cases, though very isolated, of poor white people seeking tenure in the City's informal settlements. This scenario is not only reflective of the City's historic land tenure politics. But it also raises the politics of 'otherness' (see Yoltay page 6 bottom) in the debates on informality by raising misconceptions about informal life as a black subculture – giving informal life a black identity.

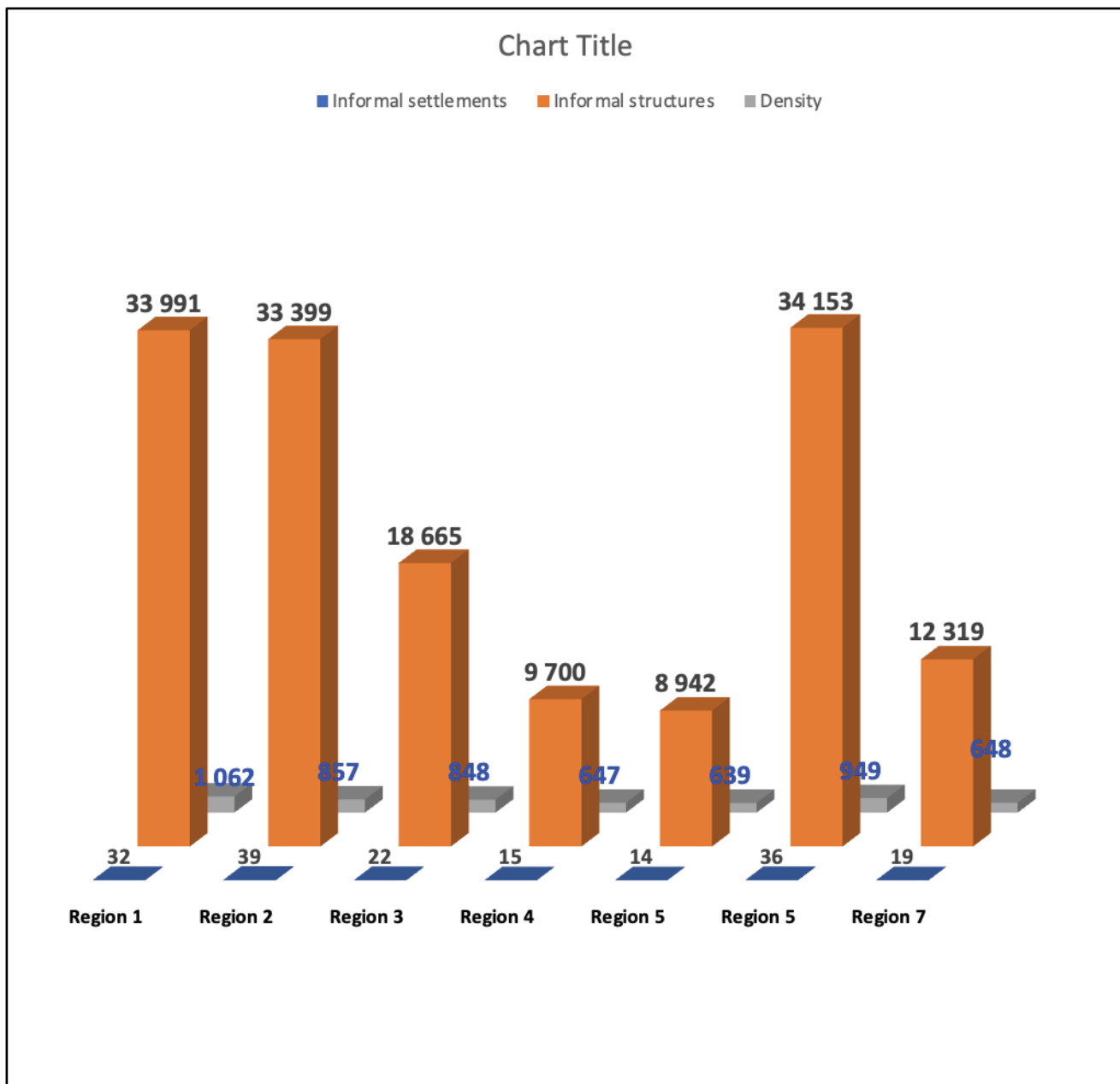


Figure 4.8: Profile of the Tshwane’s Informal Settlements
Data Source: SHSP (2013)
Graphics: Author (2020)

4.4.3 Spatial location, tenure, and vulnerable living environments

The dense spatial development pattern presented above offers another outlook on grappling with the environmental struggles of the urban black poor, particularly concerning the ensuing poor liveability associated with informal settlements (Bird et al., 2017). Like elsewhere, informal settlements in Tshwane display an intricate spatial pattern, characterised by poor living environmental conditions. The spatial ordering of informal settlements in Tshwane varies across and within the City's seven regions. Based on their location, informal settlements can be classified as either peripheral, central or island settlements [see box 4. 2]. The United Nations report (of 2003) highlights a correlation between location and size of a settlement. For instance, the relatively large-scale nature of peripheral settlements stems from the fact that they are seldom constrained by competing development. But in Tshwane, the correlation between size and location pans out differently. In each of the CoT's seven regions the location of the largest, and by implication the densest, settlements vary based on context. The spatial ordering of the largest settlements in Regions 1 and 2 are, for instance, mostly peripheral. The Winterveld North area is the densest settlement in Region 1 with the highest concentration of informal structures, at 12, 304 units (SHSP). The settlement is located along the edge of the City, about 60 km away. This peripheral settlement type is also observable in Region 1. Tswaiing Village is the region's bulkiest settlement with 8, 731 informal structures. Understood from the context of the CoT's overall spatial development, the peripheral spatial pattern pushes for the development of standalone townships. Consequently, these peripheral settlements promote an unplanned expansion of the City's boundaries.

Whereas peripheral settlements perpetuate informal tenure as a stand-alone idea, central formations, to a degree, promote the integration of formal and informal tenure systems. Some of the most populous settlements in Regions 3 and 6 respectively can be classified as central settlements. These settlements emerged along the borders of existing formal townships, which are an apartheid system settlement formation for Africans established on the fringes of the City. But I argue informal settlements developed adjacent to the townships fit the central settlements profile [see box 4. 2] since they continue from the established formal settlements. Such central settlements are also present in Regions 3 and 6 of Tshwane.

Lusaka and Phomolong are two of the largest central settlements adjacent to Mamelodi East X22 township in Region 6. Both settlements host the bulk of informal structures in the region, with Lusaka at 4 926 and Phomolong at 2 666. Likewise, Jeffsville in Region 3 is one of the densest and largest central settlements, neighbouring Atteridgeville township and hosting 2 557 informal structures. The convenient location of central settlements makes them generally more attractive to those seeking tenure. Therefore, it is not surprising that central settlements can, at times, be more populous than peripheral settlements.

Some of the residents in Phomolong and Jeffsville pointed to the conveniences offered by these central settlements. They highlighted proximity to transport, schools and health facilities as some of the essential aspects of choosing central settlements. However, some of these central settlements face

poor living environments. For instance, Jeffsville is built on dolomitic soil, and over a couple of years, the settlement has experienced numerous sinkholes. However, due to land tenure deprivation, the sinkhole areas are reoccupied without proper rehabilitation. For those seeking tenure, these environmental concerns are secondary. They are superseded by the daily conveniences offered by the centrality of these settlements.

To the city, central settlements are preferable in that extending service delivery to them is less of a challenging task compared to peripheral settlements. As noted by a CoT official, peripheral settlements complicate service delivery:

"Then we have those who do not have access to anything which still use rudimentary services purely, they are not far from town, but they lack the principles of habitable human settlements. The moment we move outside the urban edge we have the bigger problem of us not being able to provide such pure amenities even if its informal settlements, but we do not have the capacity to provide"[Interview: city official 2*, August 2018]

This comparison seems to suggest that central settlements would have a better environmental quality than peripheral settlements. However, this is not a true reflection. Central and peripheral settlements in the CoT equally share the burden of informal tenure and their poor living environments reflect this. The CoT acknowledges that service delivery to its informal spaces is inferior:

"This has led to many people living without access to adequate sanitation, running water or electricity. Informal settlements were left dirty without regular refuse removal or area cleaning". (Tshwane 2017:23)

Many settlements rely on informal practices for accessing service delivery. For instance, access to sanitation is through makeshift drainage systems and pit lavatories. As a result, sewerage water flows haphazardly around the settlements [see figure 4. 7]. For waste disposal some resort to burning of waste and open dumping. Hence, uncollected waste dumps are a common occurrence in the City's informal settlements [see figure 4. 7]

This burden of informal tenure is also reflected in the poor housing quality. The majority of the informal settlements in Tshwane, both central and peripheral, are characterised by poor-quality housing, comprised of haphazardly constructed makeshift structures, commonly referred to as shacks [see figure 4. 7, frame a]. The construction quality of shacks differs from that of formal housing. Shack structures are usually constructed from corrugated iron roof sheets and built without concrete foundation footing. Thus, they are not structurally durable and are prone to harsh weather conditions. These shacks are also relatively small in size; usually one roomed with no internal dividing walls to split private spaces and common rooms like kitchen and lounges. Curtain material is sometimes used as internal partitioning to create privacy. Thus, the informal dwellers in the City experience overcrowding equally inside the homes and around the settlement.

Weimann & Oni (2019) assessed the impact of poor housing conditions and inadequate services, particularly on the overall health and wellbeing of the informal dwellers. In this study, the authors remind us that housing shortages should be viewed as more than just a material limitation, as housing

is a significant component in the urban system with socio-political and environmental implications. Given this, the fact that the CoT may be facing a housing backlog of 155 948 formal housing units as of 2013 figures to address informal tenure [see figure 4. 9] should be concerning.

It is mostly unnerving because the CoT also seems challenged in its ability to meet these housing demands:

"Given the size of the housing backlog, the rate at which it grows, as well as the enormous pressure towards the upgrading of informal settlements, it becomes important that consideration be given to intervention in the delivery of housing in the City of Tshwane". (City of Tshwane, 2013b, p. 68)

One of the key challenges to housing delivery in Tshwane has been the land reform-as the empirical evidence shows. While these issues remain unresolved, many settlements in the CoT remain in unsafe and unliveable environments. Figure 4.9 gives a vivid illustration of the poor living conditions in the City's informal settlements. The Sustainable Development Goals use the concepts of safe and liveable environments as indicators for sustainable and inclusive cities.



Figure 4.9: Living Environments Phomolong Informal Settlement

Source: Author (2018 August)

In the preceding sections, I outlined how spatially entrenched racism continues to influence urban development in contemporary Tshwane. The environmentally unjust conditions observed in the City's informal settlements, exemplified by for instance uncontrolled solid and sanitation waste, are a manifestation of this spatial development.

The City has not turned a blind eye to the appalling and vulnerable state of living in informal settlements. The 2013 adoption of the UISP instigated the improvement of the quality of life in informal settlements. Where the City has initiated these interventions, there are some notable positive improvements. Settlements that have had intervention display more structured spatial patterns, are less dense and experience somewhat improved access to service delivery. For instance, following the City's intervention on parts of Phomolong informal settlement, there is clear demarcation between the street and the private spaces. The settlement also receives water supply by water cart twice a day. While this development is generally welcomed by its beneficiaries, it still falls short in shaping environmentally sound spaces and expressing the envisaged quality of life characteristics.

Central slums

Central city slums tend to have been formed by the classic process where central, prosperous residential areas of cities undergo deterioration as their original owners move out to newer,

more salubrious and more fashionable residential areas.

Initially, the housing vacated by the better-off, which generally has reasonable infrastructure and services, is ideal for those willing to trade off less space and shared amenities in exchange for access to employment opportunities.

Island slums

Scattered throughout cities are 'islands of slums', surrounded by formal housing and other officially sanctioned land uses. These islands may have been intended as open or green spaces, as the land was thought to be unsuitable for future housing, or locations that are physically or

environmentally unsafe.

Slum islands that are closer to the centre share many of the advantages and attributes of the central slums.

Peripheral slums

Peripheral slums can be quite large settlements since they are rarely constrained by competing development.

Box 4.2: Settlement Types

Source: UN (2003)

4.4.4 From the RDP to the UISP: Discourse on informality

Post-1994, the national housing policy and legislative framework underwent an evolution to mitigate the housing challenge in democratic South Africa. The Reconstruction and Development Programme (RDP) - the first policy intervention evoked by the democratic government to counteract the negative consequences of apartheid policies like the Land Act of 1923- and lately the UISP, derive from that long history of housing policy. One of the main objectives of the RDP was to address the housing tenure challenge inherited from the apartheid era. Thus, from 1994 there have been some aggressive efforts to provide housing infrastructure to the previously marginalised black South Africans. But this approach was proving to be a challenge, as the housing backlog was growing, leaving many to continue seeking tenure in informal spaces. The introduction of the UISP in 2004 was not only a response to this backlog, but it also brought informality into the spotlight of urban governance. As pointed out by van Wyk (2012) it was only until the introduction of the UISP that informality became a governance priority in post-1994 South Africa. Nonetheless, unlike the RDP, this policy programme places focus on tenure formalization, thus, shifting the current housing policy fixation of eradicating informality through housing provision.

While the discussion in Chapter 6 engages further with formalization, at this stage, it is crucial to locate its place within the overall housing policy. By doing so I contextualise how informal settlements are considered in housing governance discourses. Thus, I first discuss the evolving housing policy framework, starting from the RDP ending with the UISP. I especially trace the emerging discourses on informality, which I argue feed into the misconceptions that undermine the place of informal spaces in the environmental governance agenda. After that, I locate Tshwane's approach to formalization within this national perspective. Here, I raise an argument that formalization in Tshwane created a platform for facilitating city politics. This, in a way, calls into question the City's justification for the adoption of the formalization programme.

I also introduce into the debate the formalization strategy, which I argue, together with the formalization programme, constitutes the CoT's formalization system. Conflicting narratives on formalization emerge from the components of the formalization system. I argue that these narratives misrepresent the place of informality in the City's environmental governance discourses. Finally, I look at how institutional issues further challenge the implementation of formalization in Tshwane's urban governance.

4.4.5 The contestations of informality in urban environmental discourses

The Reconstruction and Development Programme (RDP) was a precursor for housing policy in post-apartheid South Africa. This policy framework was implemented in 1994, a critical political transition period in South Africa, to take the country forward. One of the main objectives of the RDP was to eradicate the spatial apartheid geography (RSA, 1994b). The RDP raised concerns about the housing and basic services crisis in urban townships and rural settlements, and its consequences on the quality of life and the living environments of the poor (RDP, section 2.5.1). Thus, addressing housing shortages and informality became a key priority of the RDP. Deliberations and negotiations were held by various stakeholders comprising business, civil society and political bodies, on the housing delivery strategy. The site and service approach was one of the proposed strategies for the housing crisis (Charlton & Kihato, 2006). However, a consensus for a mass housing rollout through the housing units, commonly known as RDP houses, was reached.

The RDP was developed and implemented under immense political pressure, in particular, to address the lack of housing tenure affecting the majority black population, which the apartheid system deliberately deprived them of. So, at that point, the link between housing and the living environment was overshadowed. Instead, the mass housing intervention approach taken by the RDP would set precedence for housing policy moving forward. This trend was carried into the 1994 White Paper on Housing. The White Paper was published in 1994 to operationalise the housing objectives of the RDP. This policy paper contained the fundamental guiding principles towards achieving the housing vision. The housing White Paper was nonetheless mindful of the complexities around housing delivery and accordingly, pronounced a robust action:

"Post-1994 housing the nation became, and continues to be, one of the greatest challenges facing the democratic regime. The time for policy debate is now past the time for delivery has arrived" (RSA, 1994a, p. 1)

This seemingly tough stance was a signifier of the state's acknowledgement of its inadequacy in addressing the housing crisis. This limitation was in a way tantamount to betraying the democracy project upon which the ANC's 1994 election manifesto rested. Thereafter, mass housing rollout intensified. By 2006 and estimated 1,877,958 low-cost housing units were delivered under the programme (Goebel, 2007), but the housing backlog has persisted. By its own admission, the state recognises the effect of its inadequate performance on the increasing of informality and poor habitable environments:

"A relatively small formal housing stock, low and progressively decreasing rates of formal and informal housing delivery in South Africa have resulted in a massive increase in the number of households forced to seek accommodation in informal settlements, backyard shacks and overcrowded conditions in existing formal housing" (RSA, 1994a, p. 3.1.3).

To this effect, the White Paper committed rapid land release as one of its key strategies:

"To meet the ever-growing demand for housing and to achieve government's goals relating to housing development, land which is appropriate for housing must be speedily released and serviced" (RSA, 1994a)

This response gave more prominence to the issue of land deprivation than it did during the development of the RDP. Nonetheless, this response to land also had its limitations. The character of the location of land for urban housing provision was becoming urgent in land reform. In particular, there was a growing demand for land closer to economic opportunities (van Wyk, 2012). Thus, the lack of strategically suitable land challenged the integration objective of the RDP. In Tshwane, at least, this meant that peripheral settlements would continue to thrive.

"It is also a fact that land closer to the inner city is generally more expensive than land on the periphery of the City, and the amount of suitable land which is located close to the Inner City is also limited" (City of Tshwane, 2013b, p. 70)

Deprived access to suitably located land also fuelled environmentally unconscious land invasions as many resorted to seeking tenure in poorly located, environmentally risky and hazardous lands. Some of the informal dwellers also noted these levels of vulnerability:

"We were just happy that we were going to have our own pieces of land. We only started noticing when the pipe started leaking. But we could not move, we wanted to be owners. But also, one did not really have other options. If you move others would occupy your stand. So, we stayed and trusted in God even though we were continuously told that we are sitting on top of a pipe" [Interview: Machekers, July 2018].*

The White Paper on housing also emphasised the land-related environmental issues in low-income housing developments. A sustainability approach to land delivery is one of the elements the White Paper vocalized:

"Promote environmental sustainability and deal sensitively and responsibly with the impact of land development on the environment" (RSA, 1994a, p. 5.7.1.8)

Despite these pronouncements, this emerging environmental consciousness was not gaining traction. The White Paper was finally gazetted into the Housing Act of 1997. This was effected without modifications to its original elements (Charlton & Kihato, 2006). There were some indications that the Housing Act somehow strived to uphold the sustainable development debate. It did so by promoting the idea of sustainable housing development (RSA, 1997; van Wyk, 2012). The constituting elements of a sustainable housing development [see figure 4. 10], highlight the norms for living environments that cities should strive to achieve. By comparison, the living environments in informal spaces are far-off from these habitability norms. Ordinarily, the dualist perspective engaged in debates around the urban spheres is criticised as undermining the relationship between the formal and informal spaces (Lutzoni, 2016). However, in this context, pointing out these dichotomies may be useful if we are to elevate informal settlements into the sustainability debates.

On the contrary, the housing policy remained muted on the living environments of informal settlements. Instead, it conveniently approached the formal and the informal spaces as homogenous.

It was only in the decade following the RDP that the liveability of informal settlements was beginning to find expression in housing policy (Huchzermeyer, 2003). This development was prompted after the government took stock of housing policies adopted from 1994-2004. From that analysis, the government came to realise the need to shift its housing policy objectives beyond just housing provision (Charlron & Kihato, 2006). The introduction of the Breaking New Ground (the BNG) in 2004 was to this effect. The BNG is a Comprehensive Housing Plan for the Development of Sustainable Human Settlements. The plan was set in motion to address the limitations in meeting the government's post-1994 commitment towards developing more liveable, equitable and sustainable cities. To achieve this, the BNG aims, amongst other things, to speedily eradicate informal settlements (BNG, 2004). One of the interventions proposed by the BNG was for *"urgent integration of informal settlements into the broader urban fabric to overcome spatial, social and economic exclusion"* [BNG, 2004:18]. This response was a signifier of informality receiving recognition in housing governance discourse. However, the scope of the BNG was broad, covering various matters on low-cost housing provision. Hence, even the BNG missed an opportunity to address informality issues comprehensively, in particular as an environmental concern. Up until that stage, there was little policy focus on informal settlements and their environmental consequences (van Wyk, 2012).

The National Housing Code (NHC) in 2009 [first adopted in 2000, see figure 4.10] was a pivotal point for a more structured intervention in informality. The NHC positions itself as a bridge between the housing policy programs and the BNG (van Wyk, 2012). Accordingly, the NHC was to continue promoting the integrated and sustainable human settlements agenda of the BNG. To attain sustainable human settlements, the NHC put forth the Upgrading of Informal Settlements Programme (the UISP) as one of the strategies. The main objective of the UISP is to facilitate structured upgrading of informal settlements to *"achieve complex and interrelated policy objectives such as tenure security, health and safety, and empowerment"*. (UISP-Upgrading of Informal Settlements, 2004) These objectives correlate to elements of sustainable housing development [see figure 4. 10].

Through tenure formalization, the UISP was also seeking to bring informal spaces into the sustainable development discourse. Despite this effort, there is a gap in addressing informality as an environmental concern, contradicting the sustainable human settlements ideology of the UISP. This association was further demonstrating the UISP's revived outlook that sought to challenge the dominant view, which frames informal settlements as merely a housing problem (van Wyk, 2012). The UISP, in a way, stimulated the debate on informal settlements and the environment by linking poor living environments in informal spaces and environmental degradation. It argues that the provision of municipal infrastructure can mitigate the negative impacts of informal settlements on the natural environment. In this regard, the UISP proposed the formalization of land tenure and services in informal settlements. The logic of this approach was that the quality of life could be improved through access to basic services and land tenure security, outside of formal housing ownership. But as the empirical data shows [see Chapter 7] formalized settlements may continue to experience poor environmental conditions, as the local governments' commitment to service delivery for formalizing spaces remains inadequate. Furthermore, due to their poor soil conditions, other informal settlements

do not fully meet the formalization criteria [see box 4. 4]. Consequently, they remain in hazardous environmental conditions such as recurrent exposure to sinkholes.

In the end, though the UISP positions itself as a turning point towards the sustainable governance of informality, it nonetheless falls short in engaging the environmental issues relating to informal settlements. This observation raises the debate about the, at times, misdirected policy interventions on informality. As noted by Roy (2005), informal spaces are intervened upon from a wrong perspective, given that factors leading to the formation and persistence of informality are poorly understood. Hence, such interventions seem to be responding to the symptoms of informality rather than to its root causes. In consequence, I argue that the environmental presentation of informal spaces in Tshwane [discussed in section 4.3] offers a rich source to locate this argument. Given that, as I will show in the proceeding chapters, the intervention in the City seems to undermine the environmental status of its settlements, this creates an opportunity to analyse the perspective from which the UISP was incorporated in Tshwane's urban governance.

Policies pointing to the gap between informality and sustainable development

RDP 1994

White Paper on Housing 1994

policy should promote environmental sustainability and deal sensitively

Housing Act 1997

residential environments to ensure viable households and communities

against the elements and (b) potable water, adequate sanitary facilities and domestic energy supply" [RSA, 1997].

Housing Code 2000

BNG 2004

managed entities in which economic growth and social

The Housing Code 2009

Strategies and programmes towards sustainable human settlements:

1. Upgrading of informal settlements, and
2. Enhancing Range of Housing Typologies-densification, inclusionary housing, etc.
- 3. Improve spatial planning.
- 4. Improving location of new housing.
- 5. Renewing Inner cities.
- 6. Improving housing amenities-ensuring sustainable & environmental efficient settlements (code-policy, 4.3.2)

UISP 2009

between upfront capital costs, long-term maintenance and operating costs, settlement affordability levels, the need for

Figure 4.10: Post-Apartheid Housing Policy Framework

4.4.6 Political talk and the formalization gap

In South Africa, the housing policy is under the custodianship of the national Department of Human Settlements. In turn, the national entity mandates local level governments to implement the policy. Likewise, the UISP is the national government's policy instrument seeks to “facilitate a structured upgrading of informal settlements” (UISP, 2004:4). Accordingly, the UISP came to local governments as a national policy directive on which municipalities are to base their tenure formalization programmes. In line with this expectation, in 2013, the CoT took a resolution to adopt the formalization programme. For the City of Tshwane, the UISP was presenting an opportunity to implement the rapid formalization of informal settlements (Tshwane Update, November 2013). As illustrated above, the City viewed the site and service approach of the UISP as a solution to its housing delivery backlog [see the City's former mayor, Kgosietsso Ramokgopa comments]

This approach arguably absolves the City's responsibility of housing provision by shifting the burden of informal housing tenure to the poor. Adopting formalization was, therefore, also introducing shifts to the housing policy in the CoT. Lemanski (2020) interprets the link between housing policy and urban politics and is of the view that the provision of housing infrastructure is employed by the state as a political tool to create a new class state independent citizen. As demonstrated in Chapter Six, the CoT's conception of permanency as a benefit of formalization depicts the idea of 'liberal subjects' (Fineman, 2010). This shift in housing policy could also be interpreted as changing the social contract between the state and the people, rooted in the ideals of the RDP, which was a political commitment to providing low-cost housing to those previously disenfranchised.

Though the City was putting forward formalization as an enabler to unleash the developmental agency of the people, its use as tool for cushioning political agendas was however self-evident. I argue that accordingly in Tshwane, formalization became more of an enabler of city politics. In his 2013 State of the City Address (SOCA) the former mayor Ramokgopa highlighted that:

“The total eradication of informal settlements remains an important goal of our work during the current term of office. Our citizens deserve places of residence that are fully serviced with title deeds.”

In this regard in 2013, the Mayor announced Re-Aga¹¹⁷Tshwane programme as a vehicle to implementing formalization. In his 2015 SOCA, Ramokgopa refers to Re-Aga Tshwane as a 'flagship revolutionary' housing programme. To match this bold rhetoric, the City set aggressive goals for Re-Aga Tshwane [see box 4. 3]. This announcement was followed by a strong determination to deliver tenure through title deeds, publicized in local media like the Pretoria News and the Rekord. Relying on this programme, the City was only able to formalize 59 of the 150 informal settlements identified through the Re'Aga Tshwane (City's Annual Report, 2014-2015).

¹¹⁷ Re-Aga Tshwane meaning we are building Tshwane, was adopted following the Mayoral Committee Lekgotla, held 19 to 21 April 2013.

The Democratic Alliance (DA), the official opposition party in Tshwane at the time, was critical of the ANC's performance towards addressing informality under Re-Aga Tshwane. The party argued that formalizing 59 out of the 150 informal settlements was below the set formalization target at the launch of the programme [[https://www.politicsweb.co.za/politics/anc-must-explain-why-only-59-informal-settlements-\].](https://www.politicsweb.co.za/politics/anc-must-explain-why-only-59-informal-settlements-) In 2016 the DA became the governing party in Tshwane after winning the local government elections. Soon thereafter, by May 2017, the DA announced a new formalization programme called Project *Tirane* to replace Re-Aga Tshwane. According to the then newly installed DA mayor, Solly Msimanga, the programme was to address the formalization failures of the previous administration. The DA communicated project *Tirane* as a more effective formalization. However, this political statement was contradicted by the programme's performance on the ground. By 2018, the *Tirane* project was still to accomplish its set goals as many settlements were still not formalized (see box 4.3). In the view of city officials close to the formalization process, shifting from Re-Aga Tshwane to *Tirane* did not yield much in terms of delivery. The city officials remarked that during the era of Re-Aga Tshwane, many informal settlements were formalized [Interview, 2018 August]. In their view, this was due to active political will from the Mayor's office, which they seem to suggest was not the case with Project *Tirane*:

"The only time we heard about the project was when the new Mayor introduced it to us. After that, nothing was moving"[Interview: city Official 2*, August 2018].

In May 2019 the CoT presented the review of its 2017/2019 IDP, where it acknowledged that its current formalization strategy was not efficient:

"The rate of formalization of informal settlements is not in pace with the rate of informalization, and the City needs to approach this in a different way. The understanding of the new formalization model and the impact on the rate of formalization need to be unpacked. This has a negative impact on the fiscus and the ability to provide universal access to services" (City of Tshwane, 2019, p. 42)

This review was followed by the introduction of a new formalization programme, the Letsema Project in 2019, signalling a corporate strategic shift in the City's approach to formalization. It was, however, also following the untimely departure of mayor Solly Msimanga two years into his tenure. There were rumours that mayor Msimanga was forcefully removed from his position by the DA leadership [Timeslive newspaper, 20 January 2019]. Thus, the adoption of Letsema could arguably be an acknowledgement of a failed political project from the previous mayor.

In the end, the City's complex political dynamics are reflected through the formalization programme. That the Mayor's office, one that is political by nature, as the custodian of the formalization programme, signifies these political dynamics. Furthermore, the continuous rebranding of the formalization programme, from the Re-Aga Tshwane to Project *Tirane* and now Letsema Project, was mainly a reflection of the political agenda of the day. Despite the limited performance of Re-Aga Tshwane, the other programmes followed on its path with even less success, keeping the CoT's formalization approach static. The objectives of the subsequent formalization programmes were superficial and have not translated into substantial outcomes, hence, the disjuncture between the

political commitments and the objectives of the formalization programme. This, I argue overshadows and reduces the formalization motivation to just political talk.

Re-Aga Tshwane: 2013

"We are going to eliminate informal settlements and give people serviced stands," Ramokgopa said. (SA News, Wednesday, January 21, 2015)

Through this programme, we will issue title deeds and provide a basket of essential services, including prepaid electricity, water, onsite sanitation, refuse removal and road infrastructure

Project Tirane: 2017

Meeting the demand for housing remains one of the City's biggest challenges as can be evidenced by the existence of informal settlements. Under the leadership of this DA-led multi-party administration we have committed ourselves to speeding up the eradication of informal settlements (Project Tirane) and to promoting security of tenure through the provision of proper housing opportunities.

- *A total of 7 informal settlements will be formalized under Project Tirane*
- *These informal settlements include Mahube Valley x15, Mabopane x 12, Jeffsville and Hammanskral West*

<https://www.dailysun.co.za/News/National/msimangas-big-plan-for-tshwane-20170518>

Letsema Project: 2019

- *The City of Tshwane has bold plans in the pipeline to turn informal settlements into townships by 2021.*
- *To provide better basic services such as water, sewerage, electricity, roads and storm water drainage system to informal settlements.*
- *He was optimistic that the upgrading of informal settlements would improve the quality of life of thousands of residents.*
- *Upon completion the project would consist of developing 1 185 units comprising 481 serviced stands and 704 affordable rental units.*
- *It was envisaged that the project would be completed by March 19, 2021.*
- *upgrades would also be implemented in other informal settlements in Mabopane, Atteridgeville, Mamelodi and Olievenhoutbosch.*

<https://www.iol.co.za/pretoria-news/bold-plan-to-turn-tshwane-informal-settlements-into-townships-30762701>

Box 4.3: Formalization Programs in Tshwane

4.4.7 The challenge for formalization in Tshwane's urban governance

While the CoT's formalization programme is seemingly politically oriented, the city also functions with a more technically inclined formalization strategy. Collectively the formalization strategy and programme can arguably be viewed as components of the City's formalization system [see figure 4.11]. The formalization strategy is more of a planning tool, since it forms part of the Sustainable Human Settlements Plan. The formalization plans and activities for settlements in each of the CoT's seven regions are outlined in the formalization strategy, depicted in figure 4.12. The formalization strategy layout the city's implementation approach to upgrading on informal settlements. Thus, the strategy can be understood as operational manual for the UISP in the city. As shown in figure 4. 9., the strategy places focus on housing units as its objective. Although the formalization strategy is an important tool there is not much information describing it.

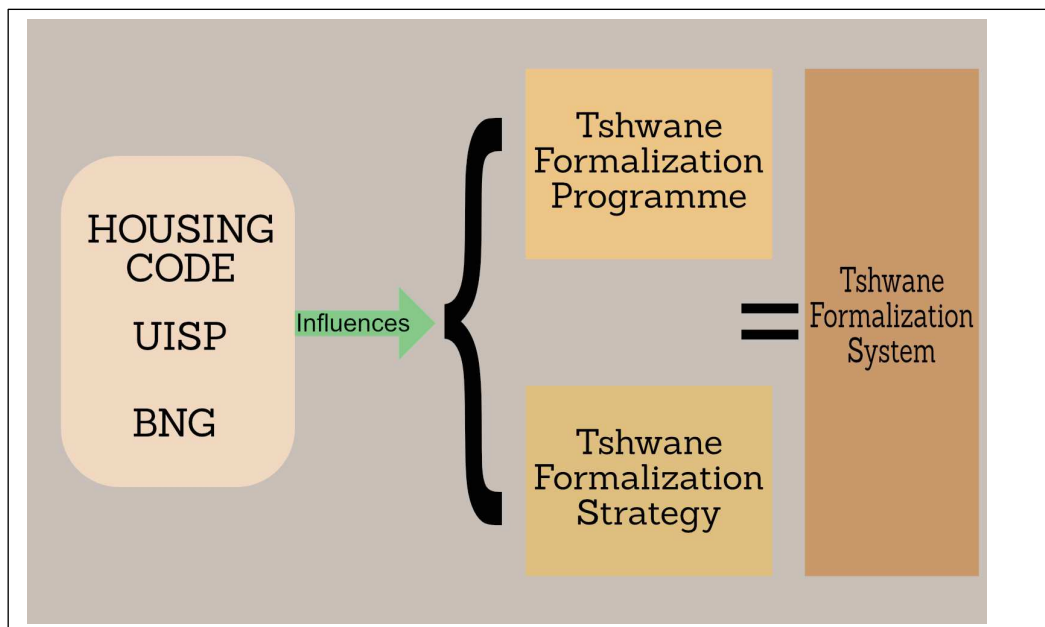


Figure 4.11: Formalization System in Tshwane
Source: Author (2020)

Nonetheless, a common goal to the components of the City's formalization system is to meet the tenure upgrading objective of the UISP. However, the components are in tension in their interpretation and approach to formalization. Formalization in Tshwane is about the upgrading of services and land tenure through the title deed, with less emphasis on housing provision¹¹⁸. The City's formalization programme seems to be more in line with this understanding, as it also emphasises the delivery of title deeds and basic services [see box 4. 3]. The formalization strategy, on the other hand, prioritises housing

¹¹⁸ The UISP approaches tenure upgrading in four phases. The provision of housing is the last phase.

delivery as an objective to formalization [see figures 4. 9]. This fixation with housing delivery¹¹⁹ in the formalization strategy overshadows the city's commitment to the sustainable development objective of the UISP, which is to transform informally settled communities into sustainable human settlements (City of Tshwane, 2013b). The CoT draws its definition of sustainable human settlements from the BNG:

"Well-managed entities where economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity. The present and future inhabitants of sustainable human settlements, located both in urban and rural areas, live in safe and secure environments and have adequate access to economic opportunities, a mix of safe and secure housing and tenure types, reliable and affordable basic services, educational, entertainment and cultural activities, and health, welfare and police services" (City of Tshwane, 2013b, p. 6).

This definition of SHS takes the socio-economic and environmental wellbeing of settlements into account, a principle that both the CoT's formalization strategy and programme seems to overlook. In the end, this weakens the CoT's sustainable development aspirations. I argue that this informs how formalization is positioned in the CoT's urban sustainability governance. Consequently, as the empirical data shows, formalization is implemented and approached by city officials as a merely housing development project, rather than an environmental or sustainability concern.

REGION	INFORMAL SETTLEMENT AREAS	NUMBER OF UNITS				COMMENTS ON ALLOCATION
		DEMAND	SUPPLY	TOTAL ALLOCATED	NOT ALLOCATED	
Region 1	32	33 991	39 127	31 932	2 059	Rural + Occupants in Koos de la Rey street (1660 units)
Region 2	39	33 399	44 743	33 052	347	Rural
Region 3	22	18 665	26 481	17 669	996	Rural +The Hills (part)
Region 4	15	16 933	15 202	15 174	1 760	Rural + Mooiplaats (part)
Region 5	14	8 942	15 403	8 696	246	More land needed in the vicinity of Derdepoort/Kameeldrift
Region 6	37	34 153	37 913	33 707	446	Rural. Surplus exist because of medium densities used
Region 7	19	9 865	12 319	9 604	261	Rural
TOTAL	178	155 948	191 187	149 834	6 115	

Figure 4.12: Tshwane Formalization Strategy
Source: CoT Sustainable Human Settlement Plan (2013: 89)

¹¹⁹ I do not wish to downplay the role of housing structures in the sustainability agenda. Rather, my intention is to criticise the mentality of the formalization strategy that seemingly speaks only to the physical improvements as a sustainable contribution.

The performance of the City's formalization system is further challenged by various institutional issues. The National Housing Code [see section 4.4. 1] predicted that most informal settlements would be upgraded by 2010 through the UIPS. Eight years following its adoption, the UISP has yet to achieve this objective. Instead, adjusting to govern with formalization has been a relatively slow process with many local governments challenged to kickstart their formalization programmes. To address this challenge, in 2008, the national Department of Housing established the National Upgrading Support Programme (the NUSP). The main task of the programme was to promote and support the implementation of the UISP. In this sense, the NUSP was to guide municipalities in governing with formalization.

Nonetheless, the effectiveness of NUSP in this regard is arguable. In the CoT, the implementation of formalization has also been a challenge. The pace of delivery has not been substantial. The official position is that as of 2013, over 189 such settlements existed in the CoT. To date, the City is only able to formalize less than 100 of its informal settlements. This poor performance could be primarily attributed to the tedious nature of the formalization process. As acknowledged by a city official tasked with formalization:

"At the rate that we are going at and the strategies we are using, we are not winning and we are not going to win any time soon at the rate we are going, we aware of it that is the truth....., highly likely it's a policy issue, for instance planning work for this can about 6 to 7 years. You don't understand why, but if you drill deep there is an application that need to be submitted, there are those studies that needs to be done"[Interview City official 3, August 2018].

This long duration challenges the pace of formalization as informal settlements are a moving target. Likewise, in Tshwane, new settlements have emerged, and existing ones expanded between 2013 to 2018 [see table 4. 1]. The city official also alluded to this:

"We are chasing these informal settlements. You formalise 8, 12 more at the same time somewhere else are created"[Interview: City official 3*, August 2018]

However, the pace of formalization in Tshwane has also been impacted by insufficient resource allocation and a lack of financial commitment. The availability of the urban land resources, for instance, has had significant implications. Some of the City's informal settlements are developed on poor land conditions, like Jeffsville which is built on dolomitic soil. Such informal settlements are not suited for in situ upgrading and require relocation. Land issues have also resulted in the emergence of transit sites, a by-product of the formalization process in the CoT. Spookpark (loosely translated as Ghost Park) is a typical transit site that emerged in the formalization process of Phomolong informal settlement in Tshwane. As noted by a city, official transit sites are a temporary solution:

"The moving around of people is just makeshift solution to say in the meantime can we work here"[Interview City official 3*, August 2018].

The City also communicated this temporality of the transit site to those relocated there, through a ward councillor:

"I also asked her [sic the ward Councillor] how long we are going to stay here, she said in 3 months you would be having water and other things. There is this girl from the municipality when I asked her and she said 'I am telling you in June you will have everything even a title deed in your hand' I have been here for almost year and a couple of months 'ke sa kakela mo'" [Interview SisZ*, July 2018].

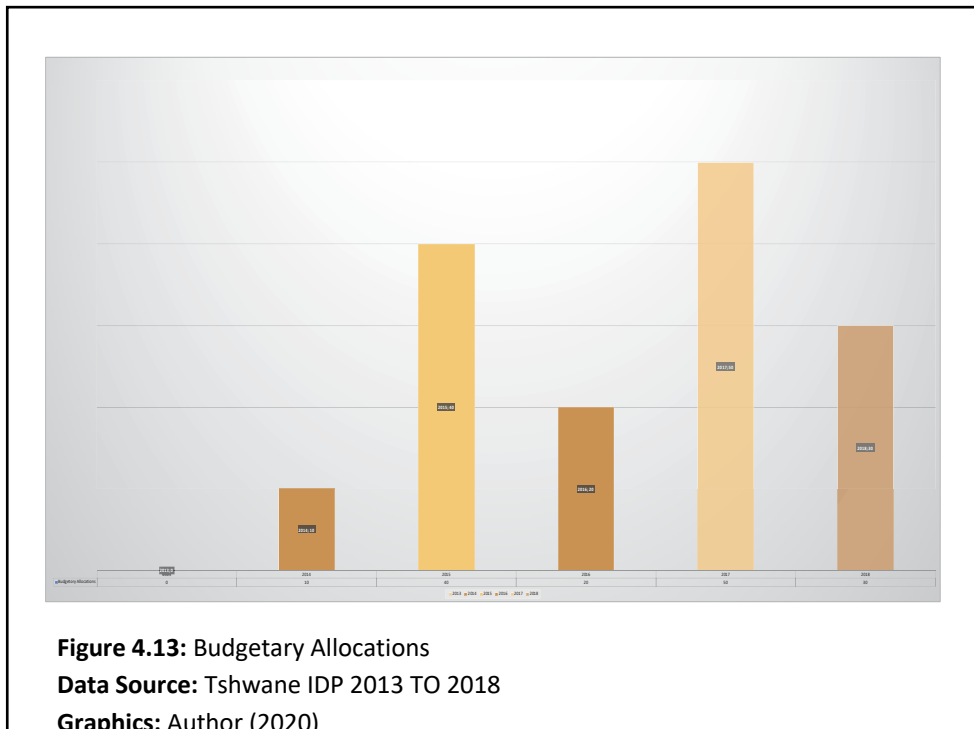
Because of the land issues the formalization process has become complex. More people still need to be relocated from Phomolong:

"We need more relief land to move people so that we can continue rearranging the sites" [Interview: Councillor Maja, July 2018].

There are some intersections between the insufficiency of land for formalization and the city's financial commitment. It appears that while the city intends to do more, there is nonetheless not enough resources allocated to this endeavor. Therefore, until the CoT can make some radical financial commitments towards sourcing suitable land, informal settlements like Jeffsville and Spookpark will remain in deferred status [see box 4. 4]. These settlements are not only neglected in terms of tenure security or access to basic services; they are also excluded from the sustainable human settlement imaginary of the UISP.

This insufficient financial commitment towards formalization also extends to the provision of rudimentary services. Provision of rudimentary services is one of the key approaches towards the upgrading of informal settlements (UISP). Likewise, the City's formalization programme [see box 4. 3] also places emphasis on extending rudimentary services to settlements authorised for formalization. For instance, in the SHSP the city advocates the provision of skip bins¹²⁰ as a rudimentary service to address waste management. This commitment is however not reflected on the ground as informal waste disposal practices, such as open dumping and burning, continue in formalizing (Phomolong) and deferred settlements (Jeffsville) alike.

¹²⁰ Skip bin is a large open-topped waste container designed for loading onto a special type of lorry.



The City's minimal financial commitment could be attributed to a cumbersome and fragmented operational structure under which the budgetary requirements for services infrastructure, related to formalization, are coordinated. To illustrate, the governance of informal settlements is a mandate of the City's Department of Human Settlements [see figure 4. 10]. The department is divided into two divisions: Housing Provision and Resource Management¹²¹ as well as Housing Administration¹²² [see figure 4. 10]. Formalization falls within the mandate given to the Housing Provision division. Some of the critical activities of formalization are distributed between the division and the city's seven regions. As mentioned earlier, the CoT's leadership administratively and politically divided the City into seven geographic regions. A city official in the department clarified the formalization roles and responsibilities of both the divisional and the regional levels:

"I used to work in the department [sic head office] before and used to be responsible for all the seven regions. What transpired is that when they introduced what they call regionalisation they decided that people should go to the actual regions to service the regions. They deployed us to the seven regions, so our relationship is that the housing department they are responsible for strategy and policy, and I am responsible for implementation. So, there is no duplication"[Interview city official 1*, August 2018].

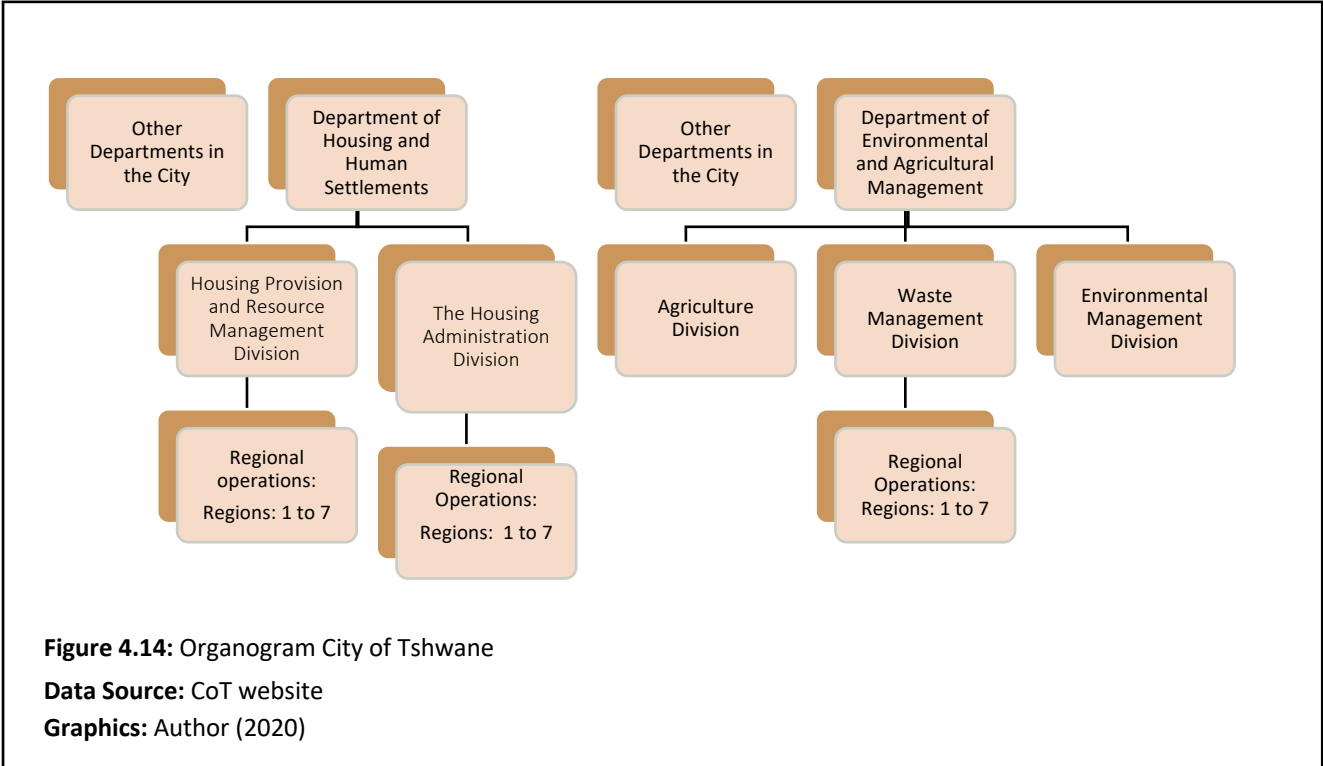
The role of the regional structure in the implementation process of formalization appears to be well placed. Each region has a manager responsible for housing with a team focusing on the

¹²¹ Housing Provision and Resource Management Division "Is mandated to manage the provision of rental accommodation for low income earners in Tshwane" (CoT Website)

¹²² The Housing Administration Division "Is mandated to add significant value to sustainable living in Tshwane through the provision of sustainable housing" (CoT website). The division "manages and eradicates housing backlogs and curb land invasions by educating communities on the problems caused by these invasions". Additionally, the division "provides layout plans for informal settlements and identify land that can be developed for the relocation of informal settlements" (CoT Website)

implementation of formalization. However, the roles and budgetary responsibilities for the delivery of rudimentary services in formalization projects rests with various servicing departments in the City. Waste management, for instance, is the responsibility of the Department of Environment and Agricultural Management¹²³ [see figure 4. 14]. A city official outlines a typical procedure followed when the formalization process unfolds.

"So normally they would bring rubbish bins in such a case. Even though she [the official responsible for waste] is waiting for me to finish, I must finish and after that I will be able to give her a complete list and not a bit by bit. Even (the) electricity (division) is waiting for a complete list so that when their section is budgeting it knows the numbers" [Interview City official 4*, August 2018].



Thus, the service infrastructure budget for formalization lacks a champion for its coordination. During my fieldwork in 2018, some city officials hinted that there were plans to restructure the housing department.

¹²³ Waste Management Division "Provide access to intermediate or higher-level waste removal services in formalized areas (proclaimed areas). Provide access to basic (communal skip) or higher-level waste removal services in informal areas (unproclaimed areas). Maintain waste sites and depots" (CoT Website)

"City official 3, with formalization unit, relocations, there is now talk that if regions come back to us, we will be fully responsible for relocating in the whole process"*[Interview City official 3*, August 2018].

"When they come to us, there is going to be another whole section of informal settlement management or something like that, and they are going to be responsible for relocations. We will still do the planning, but they will take care of informal settlements"[Interview city official 3*, August 2018]

It seems the city officials anticipated this proposed intervention by the City to centralise the governance of formalization. However, in the meantime, the integration of formalized settlements in the CoT's governance framework continues to face complexities. The introduction of NUSP was to smooth out the implementation of formalization. However, the programme fell short of guiding the City, at least in Tshwane, on how to navigate these institutional challenges, in particular, land politics that are proving to be a significant obstacle to the formalization process.

-Settlements viable for in situ upgrading:

Those which, realistically, can be replaced with formal townships within no more than five years, either in that same location or elsewhere, using the resources available to the municipality and to the satisfaction of the residents. Interim or basic services should be provided to those settlements located on sites which are viable and appropriate for long-term full or partial in situ upgrading, where this is not going to happen in the short-term. The intention with this category of settlement is eventual formalization.

-Deferred relocation settlements:

Those settlements which are likely to stay where they are for many years. The majority of your settlements may fall into this category. These settlements need to be relocated, but it is not urgent. The provision of interim services to this type of settlement should focus on health and safety including provision of water, sanitation and refuse removal, addressing particular risks faced by the residents and emergency access for fire engines or alternate fire-fighting arrangements.

Efforts to minimise wasteful expenditure must be balanced against plans to relocate the settlement.

-Settlements requiring immediate relocation:

Any settlements that must be urgently relocated because they are seriously dangerous or hazardous. These settlements are located on land that is unsuitable for human settlement. Any interim services will result in all service investments having to be abandoned. The plan to provide interim services should take into account how long it is expected to plan an alternate settlement.

Box 4.4: UISP Categories

Data Source: NUSP (2015)

4.5 Conclusion

This chapter focused on the legacy of apartheid governance, to set the context for the relentless land tenure politics and their framing of the dual urban tenure structures that continue to shape the daily experiences of people in informal settlements. I argued that these land politics inhibit the performance of formalization. I further argued that the rise of formalization in Tshwane serves as a platform for the facilitation of city politics. As argued by Muchadenyika & Waiswa (2018), political tensions tend to undermine slum upgrading programmes by exploiting the vulnerability of informal dwellers as sources and resources for political agency. In Tshwane, the implications of these politics on formalization are reflected through the persisting spatial, social and environmental marginalization of the informal dwellers [as will be seen in the proceeding chapters]. This observation is useful for enriching the UPE's view on other localized ways from which subaltern spaces emerge and are sustained. It is also useful for bringing to the fore how the living environments of the City's informal settlements are contradicted with the imaginary of the sustainable city paradigm. This contradiction, I argue, derives from the persistent incapacity of housing policy to conceptualize informal settlements as an environmental concern in city governance discourses. Of interest is that the formalization process in Tshwane was initiated at the time when environmental issues were becoming a significant focus element in the City's urban governance. Therefore, it was the aim of this chapter to present informality as not only a spatial production of the state's land tenure politics. The chapter also aimed to illustrate the environmental complexities of tenure deprivation and their tensions with the sustainable development agenda of the City. Thus, with this mind, in the proceeding chapter, I will show how these complexities play out in Tshwane's pursuit of urban sustainability.

CHAPTER 5

Re-imagining Tshwane and the Politics of Sustainable Urban Governance

5.1 Introduction

The previous chapter delved into the history of urban housing policy in Tshwane, to relate how different regimes, particularly the segregationist apartheid state, have shaped and continue to influence the City's urban development dominated by persistent informality. The chapter also demonstrated how the democratic regime introduced the formalization process as an intervention to address informality. This was at the same time that urban environmental politics were also finding expression in the City's governance agenda. Globally, cities and local governments have been placed at the forefront as essential players to address issues of climate change, disaster risk and resilience (Pasquini et al., 2015). That Tshwane as a city is challenged with perpetual informality while pursuing urban sustainability goals makes it a good site of experimentation for city environmental politics.

Before discussing my two empirical cases- Jeffsville and Phomolong informal settlements- to assess how the formalization process plays out in their context, I first provide the background to introduce significant aspects related to the sustainability and informality nexus in Tshwane. Here I intend to show how the City imagines sustainability as the antithesis of informality and not as something that can be worked out together. Borrowing from Hens (2010), I argue that informality is regarded as one of the contemporary challenges for sustainable urban governance. In Tshwane, although the environmental-related policy discourses have been steadily developing, they remain, however, more concerned with ecological and economic aspects of sustainability, than with issues of social inclusion and justice in (Ponzini & Rossi, 2010)he City (Ponzini & Rossi, 2010). As the literature reminds us, environmental mitigation measures can benefit one part of a city and have adverse on another, particularly the less privileged neighbourhoods, which are often left vulnerable. These areas cater to the most economically vulnerable people's habitability needs, yet are most threatened by the impact of climate change, making the goal of inclusive urban sustainability governance a myth.

To understand the emergent sustainability governance terrain following the institutionalization of sustainability in the City, this chapter presents the following steps: First, I highlight how the idea of sustainable cities was grounded in the City of Tshwane. I specifically show how the concept was moulded to subsequently align with national developmental governmental objectives such as the RDP, this with the objective to promote the Remaking of Tshwane as a project of inclusivity. Through this illustration, I intend to frame the argument that the disconnect between the City's sustainability agenda and informality contradicts these developmental ideals constituting its urban sustainability discourse.

Having established that, the chapter will seek to understand what propels the City to pursue the idea of urban sustainability. In this regard, I argue that mayoral politics influence this decision. To expand on this argument, I further look at how sustainability was made governable by tracing the restructuring of the City's environmental structure to accommodate the newly established Sustainability Unit. I further illustrate how, in order to be strategically positioned as an influential actor in sustainable urban governance, the Unit was capacitated with a cohort of environmentally minded workers. Coupled with that I also look at how the City, through the Unit, enrolled as a stakeholder in global environmental governance networks, in this way deploying global urban sustainability approaches to the City, which I argue are somewhat lagging to be able to properly address local environments dominated by informal settlements. Lastly, I then look at how those global environmental discourses have become construed as a benchmark for sustainability in African cities, through the City of Tshwane led an African version of the environmental network, the African Sustainable Capital City (ACCSF).

In closing, the chapter raises an argument about the limitations of Tshwane's capacity to govern sustainability. I do so by looking at the contestation levelled around the Sustainability Unit, arguably the City's hub for the sustainability narrative. Despite its sturdy political backing and institutional capacity, the Unit has not been able to entrench the sustainability subculture in the City. Instead, its establishment has contributed to the fragmented environmental governance in which informal spaces continue to be marginalized from the process and redistribution of resources. Thus, what I realized from the case of Tshwane is that while the City has made inroads as an actor in the global sustainability networks, its outwards approach to sustainability needs to be realigned to its urban environmental politics.

5.2 Remaking of the South African Capital City

Vision 2055-Remaking the Capital City is a project of dissociation from immediate post-apartheid policies and politics. Through this vision, the City of Tshwane seeks to rebrand itself as a contemporary city in post-apartheid South Africa. Post-1994 South Africa marked the 'end' of segregation and the period of urban policy reforms. The urban policy discourse was dominated by ideas of shaking off the apartheid legacy in line with the RDP¹²⁴ objectives towards social justice and urban reconstruction. Thus, cities were seeking to reinvent themselves from the apartheid-city urban development form, which is dominated by spatial injustices such as persistent informality.

In 2013 the now former mayor of Tshwane, Kgosietso Ramokgopa, announced the launch of Tshwane Vision 2055 - The Remaking of South Africa's Capital City. Tshwane Vision 2055 is a governance tool that aims to transform the contemporary City of Tshwane into a spatially 'just' urban environment by the year 2055 (Tshwane Vision 2055, 2013: 114). The purpose of Vision 2055 was to provide the City with a broad development logic guiding the decision-making process over the next four decades (Vision, 2055). As pointed out by Riffat et al. (2016), such strategic future visions are a necessary means towards cities maximizing an integrated total of environmental, social and economic values. While their long-term strategic approaches may vary, inspiring cities of the future like Toronto, San Francisco, Stockholm and Singapore share common aspirations of being carbon neutral and sustainable, exploiting the latest technologies for construction, renewable energy, recycling and transportation (Riffat et al., 2016: 6).

Likewise, Vision 2055 is a form of City Development Strategy (CDS) – a long-term road map to city development – that arose as an emergent initiative in international policy and practice (Parnell & Robinson, 2005). Developing countries were encouraged to follow suit from developed countries and adopt CDS to promote their economic development (ref). Vision 2055 was not the City's first CDS attempt. The City's first CDS was put in place in 2004. But for Tshwane, Vision 2055 differs from this globalized narrative, as the City justifies the creation of Vision 2055 as being in line with the principles of the IDP¹²⁵ (City of Tshwane, 2013d). The IDP is not only an anchor in the development of governance structures of cities, given that it 'presents the new vision for the City (City of Tshwane, 2017b), but it is also intended to aid post-apartheid urban reconstruction (Visser, 2001). This makes Vision 2055 a high-level strategic intervention, whose elaborate nature requires it to be interrogated beyond its superficial rhetoric on urban development. One of the key strategies towards the Remaking of Tshwane is the pursuit of urban sustainability – a long-term aspiration set in line with the Tshwane Vision 2055 (City of Tshwane, 2013d).

Chapter 4 presented a depiction of the socio, economic and environmental challenges in the contemporary City of Tshwane. That sustainability was chosen as a priority amongst this myriad of

¹²⁴ RDP- Reconstruction and Development Programme:

¹²⁵ IDP-Integrated Development Planning: An instrumental in setting the tone for strategic planning in local government in South Africa. "The IDP is the principal strategic planning instrument which guides and informs all planning, budgeting, management and decision-making processes in a municipality" (IDP). IDP is rooted in the 1998 White Paper on Local Government¹²⁵, and a directive of the Municipal System Act of 2001(MSA¹²⁵). The MSA states that each municipal council must, within a prescribed period after the start of its elected term, adopt, a single, inclusive and strategic plan for the development of the municipality.

competing governance challenges highlights, to borrow from Bunce (1980), 'the direction of priority shifts', ushered in by new political vision. This commitment could also be attributed to the fact that the City seems to regard sustainability as a key governance element. In his 2015 address to the Heads of African Missions in Tshwane, Ramokgopa said:

"Sustainable development and the green economy are key policy foundations of the City of Tshwane and a means to stimulate economic growth," [Tshwane Media Release, 5 March 2015]

In Vision 2055, the City envisaged the remaking of the capital city into one of the sustainable cities in the world. So, embedding Vision 2055 and the sustainability agenda in the reconstructive ideals of the RDP and the IDP points towards a remaking of the City project that seeks inclusive governance. Therefore, in this section, I unravel this connection by demonstrating how Vision 2055 lays the foundation for Tshwane's sustainability agenda. To do so, I start by grappling with the City's sustainability agenda to get insights on the logic in which it is rooted. Coupled with that, I also move to present a broad overview of some of the environmental challenges facing the City. Lastly, I trace the City's conception of sustainability by turning to some of its critical environmental-related governance instruments; the aim being to illustrate their bio-physical inclination.

5.2.1 Setting the City's Sustainability Agenda

The idea of sustainable cities has become a trend in urban development globally. These programmes of urban sustainability nowadays define local urban development (Basiago, 1999). At the forefront of these developments has been urban planning policies and programmes 'that seek to achieve urban sustainability in the near future' (Riffat et al, 2016). Jenna Tsui, a Texan environmental journalist, writes that cities that survive will be sustainable ones. Thus, key challenges for future cities comprise sustainability and good governance (Riffat et al., 2016). The City recognizes the importance of partaking in sustainable development action by stating that:

"Throughout the world, cities are implementing programmes and initiatives that will improve their resource efficiency to support sustainable city development"(City of Tshwane, 2013d, p. 123)

Thus, the adoption of the Vision 2055 signified the City's commitment to the sustainable cities' movement. For the City, following sustainable development ideals – implying the effective use of its natural resources in ways that reduce the impact on the environment – is imperative as it seeks to overcome the challenges of poverty, inequality and unemployment (City of Tshwane, 2013d). The setback with sustainable cities, however, is that there is often a disjuncture between their intended objectives and the actual benefit to certain sectors of society. This may include exclusion and inequality in urban environments that ensue from undermining the city as a complex of social, economic, cultural and political concerns, partly because of the narrow emphasis on the sustainable city as a site for achieving bio-physical environmental goals (Vallance & Perkins, 2010).

Tshwane Vision 2055 was, however, alive to the fact that to exist as a post-apartheid city it has to inclusively address its socio-economic and political challenges manifesting from its segregated and unequal geography [see chapter 4]. This is evident in the re-alignment of its sustainability agenda with the RDP ideals [see figure 5.1]. From Tshwane's point of view, the success of the Remaking project in a spatial context – as envisaged by the RDP – would be measured by the achievement of the principles of spatial justice¹²⁶, spatial sustainability¹²⁷, spatial resilience, spatial quality, and spatial efficiency (City of Tshwane, 2013 also see figure 5. 1). These elements are some of the characteristics that generally define a sustainable city (Schipper & Silvius, 2018). In the end, grounding the City of Tshwane's sustainability agenda within RDP principles implicitly illustrates that though there was some shift in urban governance rationale towards sustainable urban development, there was also some recognition of the social contract between the state and the people to address social challenges. In this way, the City's sustainability agenda is arguably not just a spontaneous global practice import; instead, it is a well-thought-out intervention that does not limit sustainability to environmental issues, but includes social ones.

¹²⁶ Spatial justice is about "reversing the historic policy of confining particular groups to limited space, as in ghettoization and segregation, an unfair allocation of public resources between areas, to ensure the needs of the poor are addressed first rather than last" (National Development Plan, 2030).

¹²⁷ Spatial sustainability is about "promoting living environments whose patterns of consumption and production do not damage the natural environment" (National Development Plan, 2030). The concept of spatial sustainability focused on the geometric and configurational ordering of space in the city (Bill Hillier, 2009)

Having said that, it is necessary to first understand the environmental situation in Tshwane in order to grasp the context of its sustainability agenda. From the many definition(s) of sustainable cities in the literature, environmental risks and hazards are some of the factors used to measure the sustainability of a city. So, next is to understand what identifiable environmental issues and risks pressured Tshwane to pursue this sustainability agenda. The following section outlines some of those challenges facing the City.

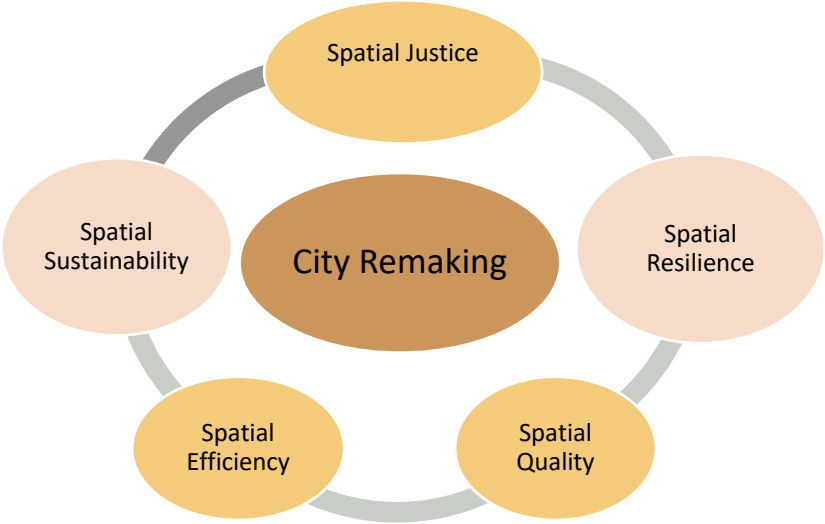


Figure 5.1: Remaking of the Capital City: Spatial Transformation Principles

Data Source: Tshwane Vision 2055 (2013: 87)

Graphics: Author (2019)

5.2.2 City's Environmental Presentation

The contribution of cities in the sustainability paradigm is Janus-faced, as they relate to both ends of climate change, a known nemesis of sustainability. As noted by While & Whitehead (2013), on one hand urban centres drive climate change, yet on another, they are amongst the most vulnerable geographical sites to the effects of global warming. In their vulnerable state, urban areas have to adjust to harsh environmental elements including, but not limited to, flooding, air and water pollution and water scarcity (IPCC 2007). Of significance is that cities in developing countries and their inhabitants are the most affected by these risks (IPCC 2007). Tshwane is no exception: the city is facing some environmental challenges which are in tension with its assumed sustainability agenda.

The City¹²⁸ acknowledges its environmental challenges are rooted in its inability to balance the key elements of a sustainable city – the economic, social and environmental aspects

"Within the City of Tshwane, the justifiable prioritization of economic and social development needs has resulted in the unsustainable use of natural resources as well as environmental challenges such as increased waste generation and environmental (land, air, and water) pollution. Furthermore, rising urban populations within the City has led to increased demands on finite supplies of natural resources, particularly water and land" (City of Tshwane, 2013d).

From this statement, it seems the City environmental challenges emerged simply from pursuing social good. I argue, however, that there are some indications of maladministration in the governance of resources. The City's water management is one such example. The water security in Tshwane is being compromised, as a result of a combination of natural and some unnatural water-related environmental challenges.

The City issues from time-to-time warnings of plummeting water reserves to its residents. This also results in water restrictions being occasionally implemented. Drought, generally climate change-induced, is one of the key contributors to the City's water insecurity. Moreover, as I will demonstrate, there seems to be some traces of poor administration of water resources from the side of the City. Ageing and unmaintained infrastructure have been cited by the City as two such administrative issues:

"The City of Tshwane experiences a high-level of potable water loss (25.7% loss, amounting to 87.9 million m³/ annum in 2015/16) due mainly to degraded water infrastructure, i.e. leaks. Illegal water connections as well as metering and data errors make up approximately 20% of water losses." (City of Tshwane, 2017a, p. 21)

A prominent case of water pollution in Tshwane in recent times is the Temba Water Treatment Plant which services Hammanskral, a township about 39km north of the City. The area has been receiving unclean water for some time because the plant was contaminated by sewer sanitation waste. The community and other stakeholders such as the South African Human Rights Commission have raised concerns regarding the implications of this water supply. The social implications of poor water security are hard felt, given that "water is a central theme in urban systems as it directly affects people in their private lives" (Delgado, 2012, p. 107). In the case of Temba, it is the poorest that are affected since

¹²⁸ The city is a phenomenon of structured complexity (Montgomery, 2007). One of the complexities rise from the fact that the city is people, all whom have different agendas and discussions. Powerful actors such as the urban mayors (Gotham, 2001: 291), are some of the key people in the City. While the City officials are also important, they nonetheless, play a subservient role as policy facilitators (Gotham: 291). Different groups of actors have different motivations and views environmental challenges.

they do not have an alternative. As highlighted by Marton-Lefèvre (2012) water security is one of the major challenges for urban resilience. Thus, secure water supply is essential since it can inhibit transformation towards urban sustainability.

The City's water security has also been impacted by the negative environmental implications to its wetlands. Wetlands are considered an important natural infrastructure. They provide valuable ecosystem services such as clean water, food resources and medicinal plants (ICLEI webpage¹²⁹). Hence, the City of Tshwane regards wetlands as a key factor that should be integrated into a city's sustainable future planning and development [Tshwane Current News; Feb 26, 2018]. However, wetlands are fast disappearing due to the urban sprawl and desiccating due to inadequate rainfall, a development the City acknowledges negatively implicates its water security.

In addition to water pollution, the City's environmental challenges also include other forms of pollution such as noise, which is sometimes referred to as 'the unseen pollutant' (Harnapp & Noble, 1987). One of the findings by Harnapp & Noble (1987) is that the denser the urban environment, the more noise pollution it will experience. This form of pollution is more a by-product of transforming urban spaces. As an urbanizing city, Tshwane also faces certain levels of noise pollution. The City attributes its noise pollution to historical urban planning that allowed the development of incompatible mixed land-uses (City of Tshwane, 2004). In September 2017 the REKORD, a local newspaper, published an article in which some residents took their concerns with noise pollution to the attention of the City Mayor.

"Noise pollution has always been a problem for many residents in Pretoria. This situation has worsened over time due to a number of businesses, factories and warehouses. After listening to residents' complaints Tshwane mayor, Solly Msimanga, has come up with steps to help people report the problem" [The REKORD, 28 September 2017].

From this account, one can argue that the economic activities in the City are one of the key drivers of noise pollution. What the City omits to effectively address is the noise pollution exposure to households in informal settlements. Because of land deprivation [see chapter 4], households in informal settlements are built in close proximity to one another. In their study on Outdoor Noise Exposure in Informal Settlements in Western Cape, South Africa, Sieber et al. (2017) found that because of the densely concentrated populations in these locations, there is considerable exposure to noise. This observation raises questions about the classist critique usually directed towards informal spaces as culprits of noise pollution. The challenge with noise, as argued by Harnapp & Noble (1987), is that it is the most inescapable form of pollution - and one which poses a long list of potential health hazards¹³⁰. Hence others like Alves, Silva & Remoaldo (2015) propose the health implications of noise must be considered as quality of life indicators in sustainable cities. One can draw a conclusion that

¹²⁹ Website accessed: June 2020

¹³⁰ "Some authorities also believe continued exposure to noise can produce anxiety, nervous tension and mental health problems. Noise levels are clearly higher in urban rather than rural areas, and as the world's population becomes more urban in the future, noise pollution will become a steadily more significant concern" (Harnapp & Noble, 1987: 220).

since informal settlements are more exposed to noise pollution than other forms of settlements, they are the most unsustainable element of the City.

While noise is a form of unseen pollutant, air pollution, on the other hand, is a visible pollutant challenging the sustainability of the City. In its IDP of 2013-18, the City links air pollution to various spatial practices of the poor and the elite:

"Air pollution continues to pose a challenge due to the apartheid spatial form which encouraged reliance on private vehicles and the burning of fossil fuels such as coal for space heating and cooking, especially in low-income areas" (City of Tshwane, 2013a, p. 133)

While informal waste disposal practices, such as burning of waste (see below) in low-income areas including informal settlements, are attributed air pollutants; air pollution caused by the elite in the form of braaivleis [barbecue, a traditional past time for the elite, in particular, the Afrikaners] should also be accounted for. Having said that, informal waste disposal practices have been a notable contributor to air pollution. Deprived of solid waste collection services by the City [see below], many in informal settlements resort to the burning of waste as means of waste disposal. The City's By-law on waste management highlights the implications of waste on the environment:

"Poor waste management practices can have an adverse impact on the environment in and beyond the municipal boundaries" (Tshwane 2016: 1)

A city official also expressed a view that 'illegal' waste practices are one of the main environmental challenges facing Tshwane. While the City recognizes informal waste practices as culprits in environmental degradation, it does not fully acknowledge its own contribution due to poor solid waste management.

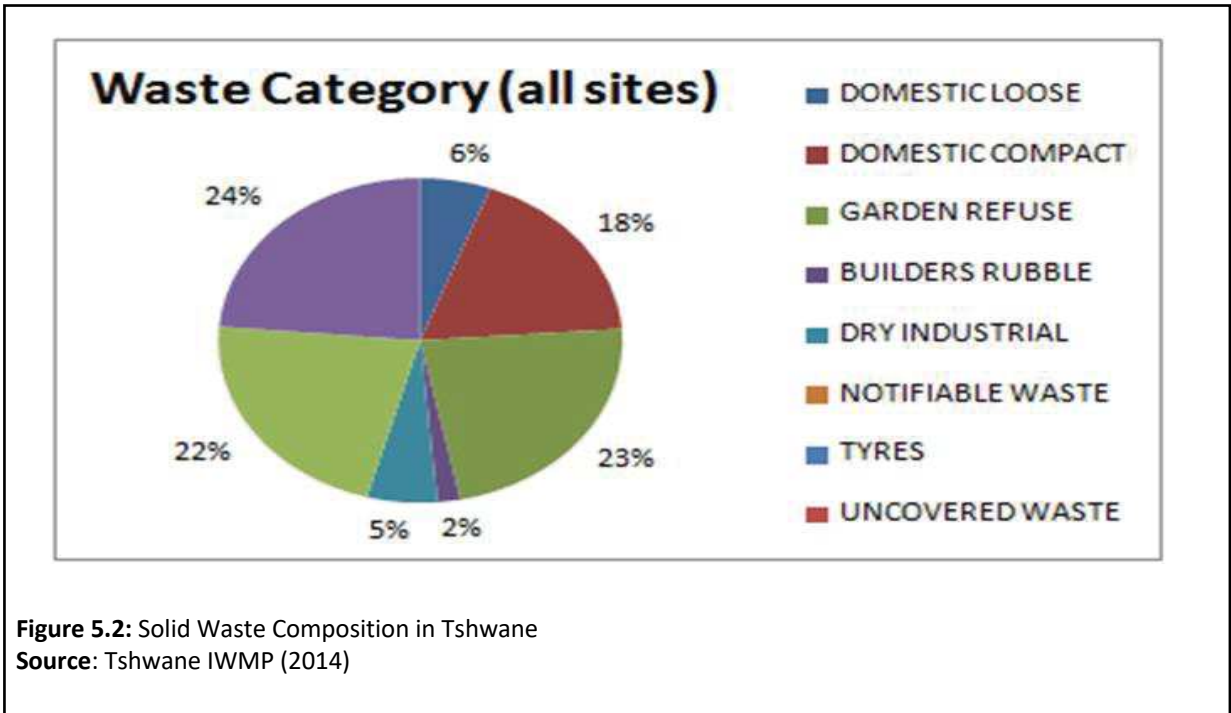
The City of Tshwane produces relatively huge sums of waste annually. These figures have drastically evolved in the past few years. In 2011, the volume of waste disposed at the landfills in Tshwane was estimated at 1 443 290 m³ (City of Tshwane, 2014). While Perry et al. (2010, p. 76) associates mounting waste generation to the consumer culture from the contemporary clusters of the upper-level income groups and urbanized lifestyle, the waste generation patterns in Tshwane indicate shifting consumption trends. As one official commented, the people's spending patterns are also changing, and the City needs to keep up with those trends:

"I think the city has not moved forward in terms of realizing that people can now afford to buy more people consume more, and when weekends come no one wants to be having rubbish in their yard, then the next street corner that's where they will dump" [Interview, city official 4*, August 2018]

Thus, with this changing consumer culture there is a need for efficiency in waste management. However, as noted by Oteng-Ababio et al. (2013), in urban areas there is some disjuncture between levels of waste generation and waste management:

"Population growth and its resultant increases in a refuse generation has necessitated the demand for an improved level of waste management service which, more often than not, is inadequately provided by city authorities" [p:39]

In the IWMP, the City has conceded that the limitations in its capacity to extend the waste management services have contributed to 'illegal' dumping. Landfills are still the dominant method of waste management in South Africa (Godfrey et al., 2015). In the City, Illegal dumping is cumulative from a range of sources including limited landfill capacity. The City's waste infrastructure currently comprises five landfill sites, two transfer stations and ten garden refuse transfer stations (City of Tshwane, 2014, p. 7). At some point the City had 10 landfill sites, however, the other 5 have reached full capacity and have been closed (City of Tshwane, 2014, p. 7). With the 10 sites, in 2011 the City was estimated to still have about 22 years of landfill space available". Nonetheless, the capacity- limited airspace continues to be the main challenge at the landfill disposal sites (City of Tshwane, 2014, p. 7). The composition of solid waste types in the City includes household, construction rubble, garden refuse, etc. [see figure 5.2]. While construction rubble constitutes only 2% of the waste categories, it has been identified by the City as one of the key sources of illegal dumping waste by building contractors.



The City's waste management efforts have to rise to the occasion. For instance, it needs to develop innovative, inclusive, and up to date waste management systems to keep up. Garg & Mashilwane (2015) argue that waste disposal pattern is part of a complex phenomenon in waste disposal management. Thus, disregarding consumption patterns means overlooking a key element in the understanding of the waste disposal system. The City's waste disposal system is based on both informal and formal practices. The predominant formal mode of waste removal in Tshwane is by truck collection. This service is generally offered weekly to most of the City's formal areas [see figure 5. 3]. In the view of the City, its waste management performance seems to be improving based on the service distribution. The City claims that access to waste removal services is progressively increasing, with 82%

of households currently serviced (City of Tshwane, 2014, p. 15). Though the City paints this rosy picture, in 2011 Statistics South Africa (Statssa is the national statistical service organ in South Africa) presented a gloomy picture concerning the City's waste disposal services. According to StatSA, in 2011, the City of Tshwane's waste removal services were being outperformed by other local municipalities in the province. The City's waste management also experiences numerous service interruptions. One significant interruption resulted from a contract dispute with waste service providers. One such incident was reported by the SABC¹³¹ News, on 24 June 2017, was that sub-contractors blocked all 12 landfill sites in Tshwane following disputes on new waste removal contracts.

The City spends a substantial amount on such contracts to keep its formal waste management system running. An interesting take from these budget allocations is that they highlight the determinations put towards maintaining a quality formal waste service delivery. However, these services are not equally enjoyed by the informal settlements. From discussions with some City officials, there are some indications that the extension of waste services to the informal settlements is a 'by the way' and afterthought. In the IDP, the City officially acknowledges that it is failing the informal spaces as:

"Informal settlements were left dirty without regular refuse removal or area cleaning. The City is committed to addressing these challenges over time in order to redress our hurtful past and provide people with dignified living spaces" [Tshwane, 2017:33].

Without adequate access to waste disposal and reliable waste collection services, many are forced to resort to informal waste disposal practices such as 'illegal' dumping and burning. Informal settlements do not have access to the municipality supplied waste bins. Hence many rely on plastic bags to hold waste. For instance, in Phomolong and Jeffsville informal settlements, the City started to provide households with about four refuse bags on a monthly basis. However, given that these areas are not fully incorporated into the City's waste disposal network, the weekly waste collection by the City's truck is not consistent. In consequence, informal dwellers create makeshift dumping sites around the settlements. Burning of waste is also another common waste disposal technique employed to reduce the piling waste and also avoid the negative health implications of decomposing waste.

The narrative above demonstrates how informal waste disposal offers an 'alternative' by filling in the inadequacies of the formal system. However, the informal waste disposal practice is in tension with the ideals of sustainability development. It directly implicates the diverse environments –economic, environmental and societal – because decomposing waste produces leachate (a mixture of toxic and non-toxic liquids and rainwater) a potential contaminant of drinking water (Garg & Mashilwane, 2015, p. 93). In addition to water pollution, the soil and air are common negative environmental implications observable as a result of the decomposing of solid waste (UNEP, 2018).

Labelling waste disposal in informal settlements are 'illegal' is depoliticizing waste, as it attributes informal waste disposal to habitus of the informal dweller. Furthermore, it also deflates the fact that the sustainability of informal spaces is obviously most vulnerable to waste pollutions due to poor administration. Thus far, I have attempted to lay out some of the environmental challenges faced by

¹³¹ SABC (South African Broadcasting Corporation) is the public broadcaster.

the City, which I linked as induced by poor administration by the City. In many urban centres, including Tshwane, the environmental woes are however also induced by other factors beyond maladministration. The environmental challenges related to climate change, such as flooding, have also become the latest reality. Flooding is unavoidable given that it is a natural phenomenon and has a specific probability of occurring in any given year. There are, however, certain land-uses that escalates the potential of flooding:

"Watershed scale changes such as urbanization change the natural rainfall-runoff regime in such a way that large floods begin to occur more frequently"[Young & Nobre, in 2011:57].

This makes urban areas amongst the most vulnerable to the effects of climate change. In Tshwane, floods are now occurring more than ever and are increasingly aggressive. Recent flooding in the city happened in December 2019 and February 2020. As captured by Eyewitness News, a local news platform, floods caused havoc around Pretoria. Homes and businesses were flooded, and infrastructure damaged. The poor living in the City's informal settlements were mostly affected. As noted by Young & Nobre the level of vulnerability in the majority of cities is equally influenced by the quality of buildings and infrastructure in the urban areas

This undermines the fact that while environmental hazards and vulnerabilities may be universal, in Tshwane like in most cities elsewhere, the poorest inhabitants are most threatened by floods, landslides and other natural disasters (Hens,2010: page). This was observed during the recent flooding in Tshwane, where those living in informal spaces were mostly implicated [see figure 5.3]. Speaking to a local radio station, following the December 2019 floods in the City, the acting mayor of Tshwane Abel Tau painted a picture of the informal dwellers that were left homeless and displaced:

"We are definitely facing a tough one as the city. The number in total in the whole city stands at 1260 according to the last count of the EMS. The bigger bulk obviously Eerste Fabriek which is where we need most of the assistance we can get or the people that need the most assistance"[Power Breakfast, 11 December 2019].

The environmental-related vulnerabilities in Tshwane also implicate the safety and security of the urban citizen resulting from sinkholes. Sinkholes¹³² are not an uncommon occurrence in SA. According to the 2011 report of the Council of *Geoscience*, about 25% of Gauteng Province, as well as parts of Mpumalanga, Limpopo, Northwest and Northern Cape Provinces are underlain by dolomite.

The report also names the City of Tshwane, in particular, the area south of the City, together with far West Rand, and the East Rand, as one of the three prominent areas of sinkholes and subsidence development in Gauteng province. But the City's recent sinkhole formations are also attributed to its ageing infrastructure. Pipe bursts have been reported to stimulate sinkholes. Two notable sinkhole formations happened in recently in the formal areas of the City. The first one occurred in 2017 in the

¹³² A sinkhole is a feature that occurs suddenly and manifest itself as a hole in the ground, sometimes with catastrophic consequences" (Council of Geoscience, 2011:6)] According to the Council of Geoscience report of 2011 "certain part of the ground surface of South Africa are prone to sudden, catastrophic collapse which may lead to death, injury or structural damage

middle of Jean Avenue¹³³, centurion. The other happened on the route 55¹³⁴ in Ladium, a suburb in the west of City, appeared in 2018. Both sinkholes were rehabilitated within a few months of their occurrence. Though sinkhole formations are a serious challenge for the City in general, it is the informal settlements that are at most risk. Some informal settlements like Jeffsville are overpopulated and built on dolomitic land. Because they are overpopulated, with a growing demand for land when sinkholes occur, they are being reoccupied without proper rehabilitation. Thus, there is continuous re-exposure to risk.

The environmental issues in Tshwane highlight the exposure to risk and vulnerability, particularly by the poor. Yuzva & Zimmermann (2011) raise a point about crisis and disasters, which they argue impose significant threats to sustainability and have the power to affect society, the environment, and the economy. Thus, it is somehow misplaced for the City to have a vision of urban sustainability without equally taking into consideration the environmental health of its spaces. The City continues to seek solutions to respond to these challenges, however, it can no longer approach sustainability piecemeal. Instead, it will need a holistic response that takes into consideration the three pillars of sustainability. With this in mind, the following sections examine how the City's approach the environmental challenges.



Figure 5.3: Flooding in Mamelodi

Source: twitter@elevatedspace (11 December 2019)

¹³³ Jean Avenue is busy street in the CBD of Centurion. The road was closed off for 6 months. The sinkhole required R25 million [1.3 million euros] to be repaired.

¹³⁴ Route 55 is a provincial road. The sinkhole was rehabilitated at the cost of R12million [0.6 million euros]

5.2.3 Tshwane: A Sustainable City Entangled with Pro-Nature Sentiments

To understand the Tshwane approach to its environmental issues, it is firstly most crucial to grapple with the City's conceptualization of sustainability. By taking this approach, I suggest that scrutinizing Tshwane's sustainability and environmental policies can help reveal its underlying ideology. This, I argue, is a crucial aspect towards understanding the city's environmental politics.

Despite its newfound professed enthusiasm for urban sustainability, the City does not have in place a comprehensive sustainability policy to address its environmental challenges. Rather the discourse on realizing sustainability is dispersed around various governance tools such as strategies, bylaws and programmes. There is, nevertheless, a common thread between these governance instruments in that they point towards environmental protectionism [see table 5.1].

Vallance & Perkins (2010) make an argument that in environmental debates the bio-physical environmental goals are often overemphasized to the extent of overshadowing other critical elements of a city such as its social, economic, political and cultural concerns. In an ideal situation, these factors would work interdependently to create sustainable urban environments. That juncture is what Evans et al. (2005) refer to as 'success in sustainability'. Unfortunately, this equilibrium is often overlooked. As stated by Slobodan Arsovski et al. (2018):

"The condition of the environment is one of the most fundamental concerns of cities worldwide, especially when high levels of pollution and environmental destruction exert an immense impact on people's quality of life" [p:17].

For Brand (2007), such discourses can be manipulative given that they front social elements such as quality of life into the debates to legitimize the environment as an object of urban governance. This trend can be observed in Tshwane. An organizing topic for sustainable city communicated by Vision 2055 is that:

"By the year 2055 Tshwane is a city that is liveable, resilient and inclusive whose citizens enjoy a high quality of life, have access to social, economic and enhanced political freedoms and where citizens are partners in the development of the African Capital City of excellence" (Tshwane Vision 2055:106)

This idea was further engrained through the Vision's definitions of environmental sustainability, interpreted as "improving the quality of life for residents by protecting natural resources" (Tshwane Vision 2055: 124).

Whereas the City works with other conceptions of sustainability, the idea of sustainability as an environmental concern is predominant. This is not surprising given that the City through Tshwane Vision 2055, expresses the importance of environmental sustainability in realizing the Remaking of the City project, by asserting that: *"environmental sustainability is a non-negotiable in achieving the City's economic and social goals"* (p: 124). This seems to promote the idea that with good environmental health in place, other elements of a sustainable city will fall in place.

This environmentally inclined tone to sustainability is set at an even higher strategic level- than the Vision 2055- by the City's IDP¹³⁵. The IDP arguably supersedes others of the Tshwane's strategies given that it sets the political direction and also guides the City's administration. However, despite its strategic importance in city governance, the engagement of the IDP with the subject of sustainability remains narrow. The IDP also fails to clearly articulate the City's conception of sustainability. This creates a disjuncture in that the IDP fails to provide a comprehensive conception of sustainability reflective of the City's socio-economic and environmental challenges. Tracing the sustainability discussions starting from the IDP of 2011-16, which is around the period the sustainability agenda was being institutionalized and finding expression in the City's governance discourse, reveals a weak conception sustainability. At that time, the IDP was identifying financial sustainability¹³⁶ as an objective to be met during its five-year term. It was only following the adoption of the vision 2055 in 2013, that the reviewed IDP of 2013-2018 began to be explicit about its position on environmental sustainability. Vision 2055 explicitly expressed its inclination to the environmental aspect of sustainability, by placing environmental sustainability as a key determinant in achieving the City's economic and social goals (p: 124).

Following on these pronouncements, the City, in line with the vision 2055, outlined some of its environmental programmes, to 'improve its sustainability score' (p:133). Those programmes claimed to have been adopted in line with the national and provincial legislation, were mainly inclined to environmental protection activities such as air pollution, waste management, and biodiversity, among others. That being the case, the pattern of conceptualizing sustainability in the proceeding IDPs as mostly a financial goal, continued well into Vision 2055. But Vision 2055 also introduced into the debate other conceptions of sustainability such as spatial sustainability. In Tshwane Vision 2055, spatial sustainability is defined as *"about promoting living environments whose patterns of consumptions and production do not damage the natural environment"*(p: 14). However, an observable commonality between the spatial and environmental sustainability is that they both place environment protection as their primary concern. This reveals the City's 'bio-environmentalist' (Clapp & Dauvergne, 2011) mindset. The Bio-environmentalists stresses the limits of the earth to support life (Clapp & Dauvergne, 2011:9).

¹³⁵ The first post-apartheid local government elections were first held in 2001. IDP is set every 5 years and reviewed annual, the City's first IDP was adopted in 2006 to date, the City has delivered 4 IDPs.

¹³⁶ Financial sustainability is defined as whether or not the City of Tshwane will have the financial capacity to continue to exist in the long-term.

Instrument	Approach to sustainability	Objective	Alignment
Green Buildings Development Policy 2009	This policy "aims to improve the performance of the built environment to reduce the environmental impact to improve the quality of life within the city" (City of Tshwane, 2009).	<p>The City has in mind that the policy will contribute to "ensure, and encourage, the development of a more sustainable built environment" (City of Tshwane, 2009).</p> <p>This will be achieved provided that "the policy promoted building standards are adhered to.</p> <p>The policy works within a confined mandate, in that it only applies to developments that require planning or building control approvals" (City of Tshwane, 2009).</p>	
Integrated Waste Management Planning (Tshwane, 2014)		<p>The IWMP was one of those initiatives with which the City commits to addressing waste management.</p> <p>The primary purpose of the plan is to set the direction for the next five years as required by national waste management legislation.</p> <p>It is responsive to the national waste management discourse and legislative imperatives of waste minimization and advocating the three R's: Reduce, Recover and Recycle" (Tshwane, 2014).</p>	<p>The IWMP is also aligned to Vision 2055.</p> <p>The IWMP is designed in line with the NEMA.</p> <p>IWMP was established in terms of the national waste strategy (IDP, 2011).</p>

Waste Bylaw	By-law highlights "poor waste management practices can have an adverse impact on the environment in and beyond the municipal boundaries	The By-law seeks to "regulate and provide for waste management services including collection and disposal of solid and all other forms of waste".	
Water conservations and demand management Strategy (City of Tshwane, 2015)		Water Conservation is the minimization of water loss or waste, the care and protection of water resources, and the efficient and effective use of water The water demand management – is a strategy and programme that positively influences the amount of water that is used (City of Tshwane, 2015)	

Table 5.1: COT Environmental Governance Instruments

The City's understanding of sustainability as heavily biased in favour of the environment reveals a disconnection from its founding position claimed to be in the ideals of the RDP. By implications, it also misses an opportunity to address the social ills deriving from environmental inequalities, as discussed in section 5.2. This gives us insights into the City's environmental politics. Because as argued by Clapp & Dauvergne (2011), how institutions allocate resources in society and manage the environment gives a better understanding of the politics of the city. In the end, this questions why Tshwane may have been drawn to pursue a sustainability agenda that is environmentally inclined.

5.3 Pursuing the City's Sustainability Culture

The New Urban Agenda (NUA) has placed cities back in the spotlight as significant actors in the global sustainable development political space. New Urban Agenda (NUA) is an urban policy programme initiated by the UNHabitat and adopted by 167 nations. It sets a new global standard for how we plan, manage and live in cities. The NUA resembles a delivery vehicle for the Sustainable Development Goals (SDGs¹³⁷), in particular, the SDG11¹³⁸ which places emphasis on urban development in a sustainable manner. In this way, the SDG 11 conforms to the idea of the sustainable city, defined as a paradigm of urban development that recognizes the ecological costs of urban wealth creation, and the need for a more socially inclusive future (Keil & Whitehead, 2012). For Tshwane, pursuing sustainable urban governance was a necessary means to improve resource efficiency and support sustainable city development (City of Tshwane, 2013d).

The embracing of the sustainability concept in Tshwane's urban governance was also an indication of shifting politics. Beal & Pinson (2014) contend that seeking a new focus on urban policymaking increasingly propels mayors to adopt a more global outlook. Kgositso Ramokgopa, the mayor elect of Tshwane steered the City towards environmental consciousness and to become a recognised actor in the global sustainable cities network. In consequence for the City, that also meant having to deploy 'mayoral politics' (Beal & Pinson, 2014) through global affiliations. Elements of these global environmental politics can be traced in the City's environmentally inclined approach to sustainability [see box 5.1].

In this regard, this section outlines how the City's sustainability outlook went global by enrolling as a member of several sustainability-related networks such as the International Council for Local Environmental Initiatives (ICLEI), United Cities and Local Governments (UCLG) and the Green Buildings Council of South Africa (GBCSA). Cities and their networks have, in the view of (Stepputat et al., 2016), repositioned themselves as influential political actors opening up new perspectives in terms of alliances and influence in global policymaking. Ramokgopa built a formidable team to champion the City's long-term sustainable development by establishing the Sustainability Unit. I argue that the creation of the Sustainability Unit was instrumental in giving the City a voice as an actor in the global sustainability network(s).

In the last part of this section, I focus on the ACCSF¹³⁹ - the platform for driving the City sustainability agenda. Not only has the project been an essential crucible for promoting the idea of sustainability as new governance logic within the City's urban development discourse, but it has also been a prominent site for an outwards looking sustainability agenda on the African continent.

¹³⁷ The 2015 Sustainable Development Goals (SDGs) were adopted by 193 nations. They are 17 goals committed to ending poverty, protecting the planet and ensuring prosperity for all.

¹³⁸ Sustainable Development Goal 11 (SDG11): Make cities and human settlements inclusive, safe, resilient and sustainable

¹³⁹ ACCSF : African Capital Cities Forum

5.3.1 What Propelled the City of Tshwane Towards Pursuing Sustainability?

Vision 2055 explicitly communicates the City's ambitions of being part of the global sustainable cities network. This it expresses by stating that *Tshwane's vision is to be counted amongst the world's "successful, modern and sustainable cities* (City of Tshwane, 2013c).

As already mentioned, the idea of sustainable cities has become the 'in thing'. This could be attributed to the fact that for many cities, urban sustainability is an alluring goal (Vallance & Perkins, 2010). One of the compelling reasons for this is that urban areas face a range of environmental challenges posed by climate change. Hence, governments and city mayors face the formidable task of finding sustainable solutions to mitigate those challenges. However, such solutions are not necessarily readily available. As Basiago (1999: 145) clarifies, there is no one size fits all sustainable city solution, hence city and regional planning regimes embodying urban sustainability must be constituted to match their unique historical, cultural, political, and environmental circumstances.

In line with the dominant pro-urban sustainability rhetoric, the City illustrates the importance of being part of the global sustainable cities network by highlighting that:

"It has become increasingly important for cities to develop the capacity to become resilient to withstand economic, environmental, socio-political shocks"(Tshwane Vision 2055, 2013: 106).

Furthermore, the City believes *that "communities in a world plagued by climatic change, overpopulation and dwindling natural resources require development that is sustainable and the realization that sustainable living equals the survival of mankind and business"*(Sustainability Unit webpage).

What emerges for these positions is that for Tshwane, like other cities, the pace of environmental policy is now mainly being shaped the global warming (Brand, 2007). However, these justifications propelling the City's to pursue city sustainability are broad and generic. I argue they are at a disjuncture with the City's specific environmental challenges on the ground.

This is significant in this context as the current urban sustainability discourse leaves out the tensions of the apartheid city, in particular the City's persisting informality and environmental inequalities. These justifications and the projected interventions to sustainability propelled the City's ambitions towards a more outwards sustainability approach, which I argue is influenced by 'global mayoral politics' (Jayne, 2012). As noted by Jayne (2012), global mayoral politics are increasingly playing a significant role in the international mobility of urban development paradigms such as sustainable cities. The former mayor of Tshwane, Kgositso Ramokgopa, was an active actor in global mayoral politics. Ramokgopa became the mayor of Tshwane following the 2010 local elections. At 35 years of age, he was elected as apparently one of the youngest mayors in the country at the time. He trained as an Engineer and was briefly a co-owner of a relatively successful civil engineering firm, before joining the City. Of interest is that Ramokgopa was taking over from his aunt Gwen Ramokgopa, a medical doctor by profession. So, his election was generally received as progressive and bringing onboard business-mindedness and modernized ideas to running the City. Soon after that, mayoral practices shifted, in particular, there was more of an inclination towards sustainability subculture and practices

evolved with the emergence of this sustainability subculture in the City. Ramokgopa put sustainability on the City's urban governance agenda.

To reinforce the City as an actor in sustainability matters, sustainability was institutionalized in the City's urban governance through establishing a Sustainability Unit in 2013. I argue that the Unit was a 'legitimization project' (Beal & Pinson 2014), in the sense that it gave the mayor the credibility as a sustainability actor and an enabler towards the goal of a sustainable city. The Unit was set up to advance the City's sustainability agenda in line with the Vision 2055 (sustainability unit, webpage¹⁴⁰). The Unit's main objective is communicated as to:

"Support the vision of transforming Tshwane, South Africa's capital city, into the greenest most sustainable city in Africa"[Sustainability Unit, webpage].

To that effect, the Unit was given both political and bureaucratic leverage. The Unit reported directly to the mayor, giving it prominence on the City's organogram and reinforcing its influence on urban governance based on political affiliation to the office of the executive mayor. This meant that the City's sustainability agenda was driven from a position of political authority. There was further indication of the strategic importance of the sustainability agenda on the City's politics. The Unit made 'ties with technocratic elites' (Beal & Pinson 2014), some with influence on the local sustainability network(s) e.g., some high profiled staff appointments were made to capacitate the Unit, like that of Dorah Nteo, who became its Strategic Executive Director. Relatively well known in the circle as proficient on the sustainability matters, Nteo was a policy advisor to national government departments before joining the Unit. She currently heads the SA Green Building Council [<https://gbcsa.org.za>], an influential local body on sustainability matters. Other strategic appointments were also made. For instance, a City official commented that the mayor mostly headhunted city officials mostly with MBAs, some with environmental backgrounds, to join the Unit. This was an indication that the technical competency was a priority, with the usual 'cadre deployment' normalized in high political positions, seemingly sidelined.

A former unit member pointed out that its establishment was to some extent, received as a 'path-breaking initiative' (Ponzini & Rossi, 2010). Therefore, many of the technocratic actors recruited to the Unit were willing to contribute to the shaping of its strategic relevance. However, not all stakeholders were on board. Some previously tasked with environmental issues felt left out by these restructuring efforts initiated to cement the relevance of the Unit in the City's urban governance. To this effect, the City's Department of Environmental and Agriculture Management was relieved of some of its functional roles, which were now mandated to the Unit. A former employee of the Unit confirms the changes:

"It is where the leg of the City climate change used to be, they took climate change from the department and took it to sustainability".

¹⁴⁰ Last accessed on the date 2020

The City's capacity to govern sustainability was now fragmented. Some officials felt that these functions were better placed within the Sustainability Unit, while others saw this as weakening the City's sustainability competence. A City official voiced a view that:

"It used to be part of us up until they restructured, maybe they put it there strategically [because] it's easier for them to coordinate from that level without them belonging to a department. However, in terms of them penetrating through city departments, I think that is still a challenge for them, and getting everybody to incorporate sustainability into their operations."[Interview, city Official 4*, August 2018]

Nevertheless, the launch of the Unit was instrumental in institutionalizing the sustainability agenda of the City. The Unit quickly became a platform through which the City sought to make inroads as an actor in international sustainability networks. As I will illustrate in the following section, through the Unit, the City enrolled membership in various international sustainability platforms. In the proceeding section, I also outline how the Unit enabled the City to engage in mayoral politics through enrolling as a member of various sustainability networks, and most significantly, through the formation of the ACCSF. Through these platforms, the City's outwards approach to sustainability was receiving more attention.

5.3.2 Outward-Looking Approach to Sustainability Governance and mayoral politics

Despite the RDP ideals under which the City's sustainability agenda was seemingly rooted, the mandate for the sustainability Unit indicates that its was to some extent framed towards an outwards and neoliberal approach. This can be read from the Unit's strategy, whose goal was to:

"Develop and guide the implementation of sustainability programmes geared towards the City's response to the global sustainable development and climate change challenges while leveraging on the available economic and financial mechanisms to attract revenue" [Tshwane website].

While this promotes a sustainable city as a model for financial stability, accessing funding for the governance of sustainable development is a challenge for most cities. However, sustainability governance networks such as the ICLEI and the UGCL seek to mitigate this obstacle by facilitating and assisting local governments to gain direct access to international funds (Zimmerman, 2014). This, I argue, sets the terms of how cities structure their sustainability governance policies and, in most instances, directly brings global politics to borrowing countries via local governments, while bypassing the national government.

In Tshwane, the Sustainability Unit facilitated a platform for the City to be permeated by these global 'mayoral politics' (Beal & Pinson, 2014). This was achieved by enlisting the City in the sustainability-related international network(s). These networks typically constitute multi-stakeholder platforms involving international organizations and private companies (Finn & van Voorst, 2016). The most notable networks Tshwane subscribed to include the ICLEI, UCLG, C40 and the GBCSA [see box 5. 1]. These networks play an influential role in the global sustainability agenda because they globalize environmental politics. They attract and bring together a cohort of local and international mayors but are also influential in advancing the dissemination of the sustainability knowledge and discourse globally [see box 5.2]. The role played the C40, for instance, in strengthening the participation of the Global South, was noted by the UNDP (2016) as a concerted effort to help address the interlinked issues of equity, climate change and prosperity. African cities have now also caught up with this 'outward-looking' way of practising sustainability governance. For example, the ICLEI has established a strong presence on the African continent through its continental subsidiary ICLEI-Africa which I would assume would carry the mandate in context. Yet, it continues to mimic its holding institutions. Tshwane is one of the 12 ICLEI member cities from the African continent, four of those being in South Africa (ICLEI). Bob Evans et al. (2005) reminds us that "involvement in such networks opens local governments up to good practice and experience elsewhere, which can, in turn, be interpreted and implemented locally". This should be appreciated given that, environmental policy is as much a local concern as it is a global issue (Brand, 2007). However, I argue that these bodies also impart the politics underlying their mandates, which in this context – individually and collectively – hold a more bio-environmentalist approach to sustainability [see box 5.1]. Though the GBCSA is a local sustainability network, it indirectly extending the international best practice to the Global South.

ICLEI – formerly known as the International Council for Local Environmental Initiatives. “Is the world’s leading network of local and regional governments committed to sustainable development (ICLEI).

Local Governments for Sustainability

Approach:

Has been influential in the development of global policies, includes a large number of cities and works on the development of approaches to sustainable urban development.

Influence:

It is amongst the world's leading networks and counts over 1,000 cities, towns and metropolises committed to building a sustainable future (ICLEI).

Tshwane links:

ICLEI associates its role in achieving the Paris agreement. The City of Tshwane also had a presence at the Paris meeting in 2015.

UCLG -United Cities and Local Governments

Approach:

Has a broader development agenda and is in the process of gathering momentum around issues such as intermediate cities and how to work with the informal sector.

Influence:

The UCLG includes Metropolis, an association of 140 big cities and metropolitan areas that co-founded the UCLG, and seven regional sections.

The UCLG facilitates exchanges and initiatives to strengthen the capacities of local governments in relation to basic services, planning and management, including, for example, the issues of informality, intermediate cities and inclusive governance.

Major international organizations and agencies are partners

C40- Climate leadership group

Approach:

C40 facilitates exchange, research, innovation, data-development and evaluation in climate change mitigation and -adaptation. It is organized around thematic networks in water and adaptation, transportation, energy, buildings, solid waste and finance, among others. C40 works closely with Clinton's Climate Initiative and has a one-window access to the WB.

C40 supports cities to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change (C40 website).

Global Influence:

Is a relatively exclusive network of currently eighty megacities and 'innovative cities' representing 25 per cent of global GDP.

C40's increasing focus on cities from the Global South represents a concerted push to help address the interlinked issues of equity, climate change and prosperity (UNDP, 2016)

Tshwane links:

The City of Tshwane was accepted as the 70th member of the C40 Cities Climate Leadership Group (C40) in September 2014 (Tshwane,2017)

GBCSA-Green Building Council South Africa

Approach:

The GBCSA associates passionate, collaborative planet shapers that operate across the commercial, residential and public sectors to ensure that buildings and homes are designed, built and operated in an environmentally sustainable way (GBCSA)

Influence:

Local membership dominantly private, public sector, and academia

Tshwane links:

Tshwane is one of the five lead members of the GBLN, a small network of industry leaders from the private and public sector who champion the holistic nature of environment-friendly building and provide strategic funding to enable the continued growth and effect of the GBCSA.

Box 5.1: Sustainability Networks

A question of interest posed by Beal & Pinson (2014: 303) is whether cities' international activities are a marker of the transformation of urban governance and urban policies? While there may be some value in joining networks which serve as motivation for city mayors to become involved in urban international governance as noted by Beal & Pinson (2014), this motivation is, arguably, more than just about governance capacity as alluded to in box 5.1. The prestige of recognition through accolades and awards (Nkula-Wenz, 2014), may also serve as a motivator. For those outward-looking local governments, in particular, active involvement in sustainability networks like the ICLEI is more of a public relations operation (Bob Evans et al., 2005). In Tshwane, the adaption of the Green Buildings bylaw, and the subsequent accolade from the GBCSA for the City's new head office building is a typical example of that motivation. The then-mayor of the City, Solly Msimanga, in an interview with Melissa Baird, the editor of the Green-economy Journal, alluded to this by stating that:

"As the only city in South Africa that has a Green Building By-law, it is about setting new trends and showing sustainability leadership"(Interview: Msimanga, 2018).

Thus, for Tshwane to be part of the networks brought prestige and international recognition for its efforts in sustainability. In 2015 and 2016 consecutively, the City was announced as the winner of the Global Earth Hour¹⁴¹ City Challenge. Presenting the 2016 award, the Director of ICLEI-Africa Kobie

¹⁴¹ Earth Hour: Started by the WWF and partners as a symbolic lights-out event in Sydney in 2007, Earth Hour is now one of the world's largest grassroots movements for the environment. Held every year on the last Saturday of March, Earth Hour engages millions of people in more than 180 countries and territories, switching off their lights to show support for our planet(WWW.earthhour.org).

Brand announced Tshwane metropolitan municipality as the most green city in South Africa, making Tshwane, for the second year in a row, local winners of the WWF's Earth Hour City Challenge.

The Earth Hour started as a symbolic lights-out event in Sydney in 2007 and has now grown into an international movement for the environment. The winners of the accolade are decided by an international panel. In 2014 Cape Town beat 163 cities in 14 countries in the annual Earth Hour City Challenge to become the Earth Hour Global Capital of the Year (World Wide_Fund for Nature). Other previous title holders include cities like Paris in 2016. In 2016, the City of Tshwane was selected ahead of cities like Cape Town as one of 13 eligible cities up for the Global Earth Hour Capital title. These eligible cities included cities like Singapore, Paris and Quito, Ecuador- to name but a few. Tshwane won the Local Earth Hour Capital, and Paris was crowned the 2016 Global Earth Hour capital. Also of interest is that the award was 'strategically' announced shortly after the then Tshwane executive mayor Kgosiensho Ramokgopa spoke of the City's commitment to its sustainable goals, at the African Capital Cities Sustainability Forum (ACCSF) – an annual meeting of mayors of African capital cities, held as part of the Sustainability Week in Pretoria (discussed in the next section). The strategic relevance of bestowing the accolade during the ACCSF was that it reinforced the image of Tshwane in sustainability networks and brought a sense of achievement for 'living to its expectations' (Bob Evans et al., 2005), as a peer in urban sustainability networks. The award also reified what Jayne (2012: 34) refers to as the 'cultural imaginaries', by sending a message that driving urban governance through 'mayoral politics' pays off. In this way, the bio-environmentalist ideals of the networks [see box 5.1] are absorbed with ease into the urban sustainability discourses of cities like Tshwane. The format of the ACCSF exemplifies this.

5.3.3 The ACCSF: Governing and Leading by Conference

The African Capital Cities Sustainability Forum (ACCSF) is the most notable project to emerge from the Sustainability Unit, and arguably a legacy project of mayor Ramokgopa. The ACCSF is Tshwane's self-proclaimed platform for the sustainability of African cities. As debated in the preceding section, the City participates and is acknowledged in the sustainability networks, both locally and internationally. The organization of the ACCSF was, however, an indication that Tshwane was seeking to position itself as a continental leader in environmental politics. The City presents the ACCSF as an increasingly powerful enabler of sustainable development goals constituted by a network for the mayors of the capital cities across the continent (Sustainability Week Magazine, 2018). Conveniently so, the ACCSF enabled Tshwane to enrol continental actors in the local reproduction of globally narrated urban sustainability governance.

The ACCSF with its myriad of policy workshops, best practice reports, case study presentations and expert roundtables, provided the City of Tshwane with ample space to inculcate the global sustainability narrative [see table 5.2]. The inaugural session of the ACCSF was hosted by the City of Tshwane, in June 2015, as part of the Sustainability Week. The Sustainability Week¹⁴² is a growing, annually held weeklong gathering, that is slowly picking up international momentum. Cities around the world such as Switzerland, Abu Dhabi and cities in Australia have started to embrace the idea by hosting this annual event. Tshwane has been hosting the annual event religiously since 2015. Nevertheless, the ACCSF went on to overshadow the Sustainability Week to the extent that the event is now mostly associated with the ACCSF.

The ACCSF's first meeting received a warm reception, graced by the attendance 20 mayors and dignitaries from the African continent and large cohort of industry captains, senior governments officials, academia and technocrats. Following this, the Forum (constituted by the Mayors) resolved to establish itself as a platform focused on sustainability issues in African cities that will meet on an annual basis (Sustainability magazine, 2017). Since then, the Forum is growing in popularity and influence. In 2019 it was expected to attract over 400 participants – mayors and city managers from African capital cities, (CoT, Official Facebook page-last accessed 12 August 2020). More and more African mayors feel the need to be part of this African network on sustainability. The Sustainability magazine shows that in 2019 the attendance of mayors from African capital cities was now sitting at thirty-seven. This is again showing the growing interest in embracing 'mayoral politics' in the governance of urban sustainability from the African context. The City perceives the Forum as a significant contributor to sustainability governance in that it places focus on the sustainability challenges specific to African cities (Sustainability magazine, 2017). Hence, the Forum is anticipated to have a significant and positive effect on how African cities develop (Sustainability Week magazine, 2016). While this statement sounds grand, it nonetheless lacks concrete commitment on transforming urban Africa into a sustainable entity.

¹⁴² See: www.sustainabilityweek.co.za

The big question, however, should be who sets the sustainability agenda for African cities' development. I started attending the Sustainability Week in 2016, a year before the start of my PhD. One of the observations was that the conference was setting a sustainability agenda that is predisposed towards 'green awareness' (Brand, 2007) and a bioenvironmental approach (Participant observations, Sustainability Week, since 2016). The other observation was that, beyond environmental issues, spaces in urban Africa also faced socio-economic and spatial challenges, such as informal spaces, that needed to be brought into the sustainability agenda. This link was, however, missing from the conference deliberations.

The contents of the Sustainability Week programme allow one to unpack the City's attitude to sustainability. The programme is structured around seminars with themes that cover a wide range of topics around city sustainability [see box 2]. Year on year since its inception the programme has maintained a common thread between the seminar themes that point towards an appetite for a bio-environmentalist approach to sustainability. For example, the waste issues on the sustainability week programme are focused on the zero-waste model (see Table 2)¹⁴³, a waste management strategy aiming for total landfill to zero waste (Snyman & Vorster, 2011). This model is centered around recycling and waste minimization [see table 5.2]. However, as Brand (2007) argues, though such urban environmental management measures are essential, they are not without limitations. Some of the shortcomings cited by Brand include the failure of such measures to address structural causes of environmental deterioration, and also that these measures individualize responsibility. This individualization of environmental responsibility is noted in Tshwane where, barring that recycling is not well established, the bulk of reusable and recyclable waste is lost to the recycling industry (Gowar, 2016). The inaccessibility of waste recycling initiatives proposed by the conference overburdens especially the poor communities with the responsibility of environmental protection.

In environmental literature, solid waste is generally recognized as an environmental hazard with negative implications on the overall urban sustainability. Many African cities, including Tshwane (see above), are in particular, faced with poor waste collection. UNEP (2015 cited in WMO:74) claims that '19 of the world's biggest dumpsites are located in Africa, all in sub-Saharan Africa, with 3 of those located in South Africa. Yet, studies such as those conducted by Godfrey & Giacobelli (2018) discovered that in most African countries only 55% of the municipal waste was collected. Consequently, indiscriminate dumping of waste remains at its highest in many African urban areas (Godfrey & Giacobelli, 2018), including Tshwane. Thus far, in this chapter, the case of Tshwane has highlighted informal spaces as most implicated by limited access to waste management resources. Thus, the disconnect between the conference deliberations and the waste governance challenges of informal spaces points to the out of touch nature of the conference. Although the City was able to position itself as a thought leader on African sustainability discourses through the conference, it nonetheless flounders in steering the sustainability agenda towards a more inclusive and 'just' governance.

¹⁴³ **The zero-waste model:** *Is a comprehensive 'Integrated Solid Waste Management Plan' with the goal of optimizing MSW management by maximizing efficiency and minimizing associated environmental impacts and financial costs. The zero waste model furthermore proposes a process of integrating MSW management services into a system that includes MSW minimization, collection, transfer and treatment with the ultimate objective of preventing landfill disposal of untreated MSW (Snyman & Vorster, 2010: 513).*

SEMINAR DETAILS	2015	2016	2017	2018	2019
<p>Vision zero waste: The rising real and actual cost of landfilling and the limitation of landfill space is driving home the reality that waste management based on disposal orientated linear paradigm will simply not be feasible nor acceptable in the future. Waste and the environmental impact of recycling and upcycling offers a very different perspective on the true cost of a product and the impact its lifecycle has. Ideally, we would be operating within an environment that supports a circular economy where nothing is wasted and everyone that supports a circular economy where nothing is wasted, and everyone gets access to the resources they need. (Sustainability Week Magazine, 2015; ,2016,2017; ,2018)</p>	X	X			
<p>Energy efficient buildings: (Sustainability week magazine, 2016)</p>		X			
<p>Food security: Agri stakeholders will gather at this seminal Seminar to share knowledge and experience and seek consensus on a key set of actions that can be implemented immediately to advance sustainability and food security. (Sustainability week magazine, 2015; 2016; 2018)</p>	X	X		x	
<p>Green buildings: Green Building is rapidly becoming the norm for new large building projects. As awareness, price and environmental pressures rise, so too has the demand for sustainable office and commercial space. New design strategies, building materials, and approaches are contributing to an ever more innovative and rapidly changing built environment. (Sustainability week magazine, 2015; 2016; 2018)</p>	x	X		x	
<p>Sustainable transport and mobility: (Sustainability week magazine, 2018)</p>				X	
<p>Green business: Harnessing market forces to drive innovation towards sustainability is the only way to redirect the planet away from its current cataclysmic path and the wheels are already in motion. How do we harness the market to a significantly greater degree to drive SA towards the green economy? (Sustainability week magazine, 2015, 2016)</p>	X	X			
<p>Industry 4.0:</p>				X	

(Sustainability week magazine, 2018)					
Sustainable energy: Africa needs extended electrification as a foundation for development, but this requires capital, and funds have been committed through the Paris Agreement for investment in low carbon growth (Sustainability week magazine, 2016; 2018).		X		X	
Sustainable mining: Introduction the Sustainability in Mining Seminar, where mining executives and other stakeholders will share knowledge and experience on best practice approaches to energy and water use, waste generation and reclamation, effluent creation and treatment, transport and related issues, as well as touch on some of the social issues (Sustainability week magazine, 2015; 2016;2018).	X	X		X	
Sustainable transport and mobility: It starts with proactive well planned, modally intelligent transport infrastructure, and extends to safe, reliable, and integrated public transport (Sustainability week magazine, 2015; 2016; 2018)	X	X		X	
Sustainable infrastructure for Smart Cities Seminar: Infrastructure either enables or frustrates development, so making the right long-term infrastructure investment decisions is crucial (Sustainability week magazine, 2015; 2016).	X	X			
Sustainable manufacturing: (Sustainability week magazine, 2016)		X			
Sustainable procurement: (Sustainability week magazine, 2018)				X	
Sustainable water resource: (Sustainability week magazine, 2015; 2016; 2018)	X	X		X	
Urban Health: (Sustainability week magazine, 2018)				X	
Green manufacturing & supply chain: Introducing the Green Manufacturing and Supply Chain Seminar, where stakeholders compare experiences and best practice in finding ways to localize manufacturing along the supply chain, seek out energy, water and waste efficiencies and protect communities and the environment, and compete locally and internationally (Sustainability week magazine, 2015)	X				

<p>Responsible tourism: Tourism is the point of convergence between the economy and the environment. The prospect of tourism dollars justifies conservation and helps to place an economic value on the environment – as such the tourism sector should be a leader within the area of sustainable business practice, and for some leading companies, this is the case (Sustainability week magazine, 2015).</p>	X				
<p>Responsible tourism: Young people are perfectly positioned to become involved through related careers and entrepreneurship (Sustainability week magazine, 2016; 2018).</p>		X		X	

Table 5.2: Sustainability Week Programme
Source (Author)

Both the ACCSF and Sustainability Week, through the Sustainability Unit, have played a role in facilitating the goal of making Tshwane's pursuit of a sustainable City status. Subscription to global networks, apart from promoting the internationalization of Tshwane's mayoral politics' more generally (Beal & Pinson 2014), have furthermore created a host of new sustainability positions and discourses, some of which certainly undermine the City's social challenges on the ground. As I have argued, these networks swayed the City's approach to sustainability governance towards a sustainability that is, first and foremost, an environmental one. It is not my intention to downplay the importance of environmental protection, particularly in a city with unequal environmental spatial development like Tshwane. However, with this approach, there is a danger of sustainability being confined to a vanity project. In this way, the City may uphold the status of a sustainable city without it translating to beneficial contribution to the three pillars of sustainability – the social, the environmental and the economic. Furthermore, there is also the danger of deliberate attempts at depoliticizing sustainability and swaying it to cater to a white and middle class, conservationist vision of sustainability. So, what kind of governance is needed to create more sustainable cities? With that in mind, in the next section, I turn towards the governance dynamics—that emerged following the adoption of the City's sustainability agenda.

5.4 Challenged by Governance of Urban Sustainability

Thus far, the chapter gave a cursory overview of the Remaking of Tshwane as a sustainable city. It has done so by outlining the City's shifting logic towards its sustainability agenda. Particular focus was placed on the observed sustainability approach, which I argued is both environmentalisms minded and outwards focused, driven by global mayoral politics hence its generic position lacking context within the City's local realities.

Nonetheless, the case of Tshwane also showed that the idea of sustainability in urban governance has enjoyed 'political will', with the former mayor as a champion, of the City's sustainability agenda. Political will¹⁴⁴ is arguably one of the key elements towards good governance (Persson & Sjöstedt, 2012). In turn, urban governance supports the pursuit for sustainable cities (Stepputat & van Voorst (2016). That the Sustainability Unit enjoys political will means it possess the capacity to successfully govern sustainability.

However, following on the proposition by Persson & Sjöstedt (2012) political will without a solid underlying shared social contract is meaningless. The social contract in the context of this study is understood as institutions, from North's (2016) definition as "the humanly devised constraints that shape human interaction". Persson & Sjöstedt (2012), contend that without a shared social contract:

"The state is conceived merely as a potential resource to be appropriated or an instrument to be used in the domination of other groups, rather than a means to serve the public good" (p:624).

Thus, a weak institution can lead to a fragmented decision-making. In Tshwane, the emergent governance arrangement institutionalizing a sustainability agenda through the establishment of the Sustainability Unit was, to some extent, pointing to the emergence of fragmented decision-making structure.

Evans et al., (2005), note that the governance of sustainable cities – which entails adapting governments and society at local level to create platforms suited for governing local sustainability – brings forth the complexities of modern decision-making in local government. However, coordinating decision-making for urban sustainability can be challenging. In an opinion piece written for the Green-economy Journal, Dorah Nteo, former head of Tshwane's Sustainability Unit and the current CEO of the Green Building Council South Africa (GBCSA), highlighted that sustainability policy faces challenges of implementation by stating that:

"I have seen how competing mandates for South African Municipalities make it difficult for city administrators to directly prioritize sustainability initiatives, but that is the wrong way of looking at it because sustainability needs to be integrated into the fabric of decision making through a series of bold and measurable goals"[Green-economy journal, 2018].

¹⁴⁴ Political will—in this context broadly understood as the will of leaders to initiate and sustain reform (Persson and Martin Sjöstedt, 2012).

Arising from these arguments, is the idea that a paradigm shift is needed to succeed in governing sustainability. For Evans et al. (2005) institutional capacity is the answer to this paradigm shift, hence, they are of the view that for local 'government' and 'governance' to meaningfully contribute towards sustainability necessitates certain capacities. Evans et al. caution though that such capacities are a deliberate action, they do not come accident.

One example made by Evans et al. (2005) concerns setting up the organizational structures in ways that encourage room for cross departmental working and stability for sustainability policymaking. The establishment of the Sustainability Unit in Tshwane- introduced earlier in the chapter- is arguably, to some extent, a show of intended deliberate action to capacitating the City for sustainability governance. There were strong indications, for instance locating the Unit in the office of the executive mayor, accompanied by strategic appointments like that of Dorah Nteo as its executive director. On the website of the C40 Cities [see box 5.1], Tshwane's Sustainability Unit is presented as having the capacity to address cross-cutting issues and discouraging a silo approach in the different departments of the City. However, the City's sustainability efforts remain fragmented because the Unit was falling short of amassing buy-in from relevant stakeholder departments. The Unit's political and bureaucratic leverage was also failing to translate into a substantial capacity for the governing of sustainability. In 2014 the Unit established an inter-departmental sustainability Forum as another means to strengthen the capacity to govern sustainability. The Forum is chaired by the Unit, and the departments deployed representatives. The department of housing, which is mandated with delivering the housing policy, including the formalization of informal settlements, was also represented on the Forum. According to a City official, the Forum held weekly meetings, and a platform was given to attending departmental representatives to table and to discuss any sustainability-related matters:

"Departmental reps were encouraged to discuss whatever sustainability-related matters from the departments." [Interview: City Official 4, August 2018]*

The Forum was, however, struggling to make inroads in entrenching the imagined sustainability subculture. There was some subtle resistance from the departments, evident in their seemingly less enthusiastic participation in the Forum's activities. Although the Forum was intended for high-level department delegates, a former member of the Unit commented that there was poor attendance by relevant departmental decision-makers. Instead, they would delegate low-level officials. There were some views that the Unit was wielding its power over departments. A former official commented:

"We have city officials who were saying no you can't enforce it, because it is not legally mandated, us from the building perspective or building regulations we are mandated by these acts, so people don't want to integrate those new type of things who are they to come and say I must force people to build green and yet.... so, people start seeing it as 'aaagh it is Dora she is pushing her agenda'" [Interview Mercedes, August 2018]*

So, despite the Unit being the mayor's 'pet' project - having political backing - in general, there was poor reception of the Unit's mandate. The Forum is presented as a:

"Task team of representatives from key departments has been established within the Unit to align the different green economy programmes of the city by enabling inter-departmental communication and

collaboration on cross-cutting projects and streamline energy efficiency throughout the city initiatives"
[C40 Cities website].

This presentation seems abstract and lacks an intersection with the functions of the departments. The Unit's understanding of sustainability was also not helpful; it is peddled as 'trees-hugging' initiative. A former Unit member outlined some of the Forum's activities:

"We even had themes like- internal, soul, if you have a soul, you are tree hugger, so how can you give us your information. There was also something to do community projects. So, we had those legs, so within the internal space...here, the focus was on how the operations, soul and city are integrated. So, we had that Forum which had city reps, but the ideal was it must be decision makers"[Interview, Mercedes*, August 2018]

I argue that these limitations created a causal effect for the Unit's struggles to conceptualize what sustainability means in the context of Tshwane [the remaking: spatial geography]. Consequently, it appears that some departments did not see the value that sustainability added to their mandate. This lack of 'real' keenness on sustainability matters, I argue, led to fragmented decision-making and coordination on sustainability matters.

As indicated above, the City's Department of Housing is one of the departments represented on the Forum and showing notable contribution to this fragmentation. The department is mandated with the delivery of sustainable human settlements (SHS), which also includes the formalization of informal settlements. So, linking the objective sustainable human settlements to the Unit's activities seems relevant. Interestingly, it appears the department's participation in sustainability had to be almost implored. As noted by an official familiar with the Unit:

"We even tried to entice them by taking them [sic - officials from other departments] to conferences. There was a conference in Cape Town a representative of the Department of Housing attended"[Interview, Mercedes*, August 2018]

The tensions between the City's sustainability goals and its housing delivery is also threatened by the coordination breakdowns and conflicts between the stakeholders. This, I argue, is because environmental issues related to housing are not sufficiently discussed or coordinated in the Forum. To some extent, this derives from the fact that decision-making is scattered between various actors, following the removal of some sustainability mandate out of the Department of Environment and Agricultural Management [see section 5.3.1]. A notable example is related to the Environmental Impact Assessment Studies (EIA), an approval normally granted before the implementation of infrastructural projects, including housing developments. This would involve coordination between Housing and relevant departments such as environmental affairs. However, there are seemingly tensions and conflicts in fulfilling this process. As an official in the Environmental Department noted that the Housing Department bypasses this consultative process unless they encounter problems:

"There is a Forum that exist called the integrated environmental Forum, but then in those meetings what gets discussed is that we have lodged an application with the provincial government so please help us to fast track it. Let me tell you what they do; I am sitting with about three of their directives from the

province. So, what they will do is to well we have identified this land EIA process initiated. Before they could even have an environmental approval, they have already moved in without an environmental authorization, without even looking at those environmental considerations I was talking about. Because if you identify land and there is a wetland you are supposed to be doing a wetland study and,,,,,,(15) with that wetland. But that never happens. So, they just go into an area and just come with engineering solutions. But the environment always retaliates if the water passes there once it will still pass again, and it will find its way. [Interview: city Official 4* , August 2018]

The department of environmental affairs feels aggrieved by this situation, for this apparent undermining of their mandate is disastrous for sustainable development. In the words of a departmental official:

"But what is missing there is the silo mentality [sic -not taken into consideration] and how we operate as a city. Because as housing they will go and say this is an open land no one is occupying it, it's city's land. This is where we are going to put people, without taking any environmental considerations into account, like the sensitivity of that environment, the water table of that environment, and the ecological value of the environment of that area where they are going to put people. and it's a challenge, a challenge for us environmental management because they will be telling you that they have political pressures to move people and therefore they have to act, and that will probably be the only alternative at a point in time, and that is how decision making is happening in the City, so everything goes wrong from planning" [Interview: city Official 4 * , August 2018]

The environmental department takes solace in the fact that they can now seek legal resource:

"They don't really dwell on the issues like we have an order here to take the people to this land how can you help us fast track it, but they don't really dwell into the details of it as well as the extent of the magnitude of the problem, some they feel they 'you know what let's just act and we will ask for forgiveness later and pay the fine', and now the environmental legislation has been amended that an organ of state can take another to court, so that is coming for the city" [Interview: city Official 4* , August, 2018]

This is a bitter pill to swallow for the department of housing. One of their housing developments was found to have mishandled the environmental rules. A housing official cried foul about the 'unnecessary' financial penalty imposed:

"I think we started last year we just wanted to put people there, the minute we cleared, to clear without authorization from the environmental authorization body,,,,, it is a contravention of the law . They are fining us R5million, it's just here I would have shown you, for just clearing to put people, where is the R5million going to come from now " [Interview city official 3* , August 2018]

Nonetheless, the social implications of such botched actions on the housing developments outweigh these financial penalties. The land not meeting environmental standards implies that housing initiatives such as the formalization of informal settlements will be negatively impacted by such decisions. One of the possibilities is having resettlements of informal settlements in hazard-prone areas.

The power struggles observed in the governance of sustainability in Tshwane are due to the fact that the social contract on sustainability matters between City actors is not in place. The consequence of that is a system in which power alternates between the competing elites only to serve their interests rather than for collective good (Persson & Sjöstedt, 2012). Role-players responsible for housing delivery, for instance, were merely looking after their interests of meeting set targets.

5.4.1 Informal Spaces: a 'Missing Link' in Tshwane's Sustainability Governance

Informal spaces have come to represent living on the spatial, social and environmental margins. It is, therefore, necessary to shift the dominant environmental narrative to also reflect informal spaces as a case of environmental injustice rather than just a historical remnant of the racist apartheid system. However, in Tshwane, the City's sustainability initiatives are understood in isolation to informal spaces – a 'missing link' of the City's drive towards sustainability. Informality plays an important role in shaping the City's housing policy. The provision of formal housing is one of the mandates of local level governments. In Tshwane, there is a backlog in housing provision. Thus, the incapacity to meet that mandate leaves a gap which informality fills by providing housing to masses of the land deprived. This highlights informal spaces as key stakeholders in housing policy delivery and in the production of urban environments.

Informal settlements contribute to creating 'vibrant living spaces', and they should be conceived as such Roy (2011). Instead, they are marginalized in decision-making processes and procedures linked to city development and functioning (Routledge, 2010). Compared to other areas of the City, informal settlements, particularly their environmental quality, is simply 'forgotten' (Routledge, 2010). We frequently learn from urban disasters studies about the intersections of poor and marginalized city dwellers and their exposures to hazardous living environments, coupled with their limited access to basic services. In section 5.2, I showed Tshwane's vulnerability to environmental risks, both climate-induced and resulting from maladministration. The City's, informal spaces are, in particular, most vulnerable to environmental hazards. A key environmental challenge facing the City's informal spaces is that they are also marginalized in the distribution of resources such water, housing, energy and waste collection. Consequently, informal settlements rely on informal systems for everyday survival. With such spatial practices, they have little or no hope to develop as spatially and environmentally 'just' spaces.

Phomolong and Jeffsville informal settlements are typical cases of this environmental injustice. However, it would be incorrect not to acknowledge some of the efforts undertaken to address environmental challenges facing the informal settlements, such as introducing governance instruments like UISP (Upgrading of Informal Settlements Programme). The UISP is concerned with the formalization process, with the aim of transforming informal spaces into sustainable human settlements (SHS). One way in which the formalization contributes to the SHS is through the provision of basic service delivery such as water, sanitation and waste management. The UISP believes that the provision of municipal infrastructure in informal settlements can alleviate the negative impacts on the natural environment. In 2013 Tshwane adopted the UISP as a mandate by the national government.

Phomolong is one of the settlements currently formalizing, the process having started in 2017 and still continuing. Its progress is impacted by land politics in the City [see chapter 6]. The formalization efforts in Phomolong have been complemented by the redesigning of the settlement's site plan, re-demarcating of stands and providing communal rudimentary services such as water via mobile water

tankers and shared portable toilets. The significant effects of the slum upgrading policy (formalization), as observed by Muchadenyika (2015a), has been a contribution to the resilience of the urban poor through providing security of tenure and infrastructure services.

In the case of Phomolong, these effects of improvements remain challenged. Phomolong shows only slight improvements to its environment. A great majority of households in the formalizing section of Phomolong still do not have efficient access to solid and sanitation waste management system. Consequently, many resort to informal solid waste disposal practices such as dumping and burning. Without proper sanitation, many continue to rely on makeshift pit toilets. Such informal practices are generally considered as major contributors to pollution and environmental degradation.

Some informal settlements like Jeffsville are excluded from the formalization due to unsuitable soil conditions. The UISP (2004) links the requirement for formalization to location and environmental factors; it notes that:

"Informal settlements may be found in various locations. In some instances, the upgrading of settlements may be a relatively simple matter while other settlements may not be upgradeable at all due to environmental hazards including dolomite, sinkholes and floodplains"(p:10).

In the view of the UISP, this is not surprising given that informal settlements by their nature usually emerge on land without prior planning, and often the land is not suited for development and has remained vacant for that reason. In towns and cities that have dolomitic land, informal settlements have often emerged on this land left undeveloped due to the danger of sinkholes (NUSP, 2015). Jeffsville is prone to recurring sinkholes. The Department of Corporative Governance (2016) acknowledged that parts of Jeffsville are in dolomite area and that uncontrolled exposure to runoff water increased the risk of sinkhole formations [see figure 5.4].

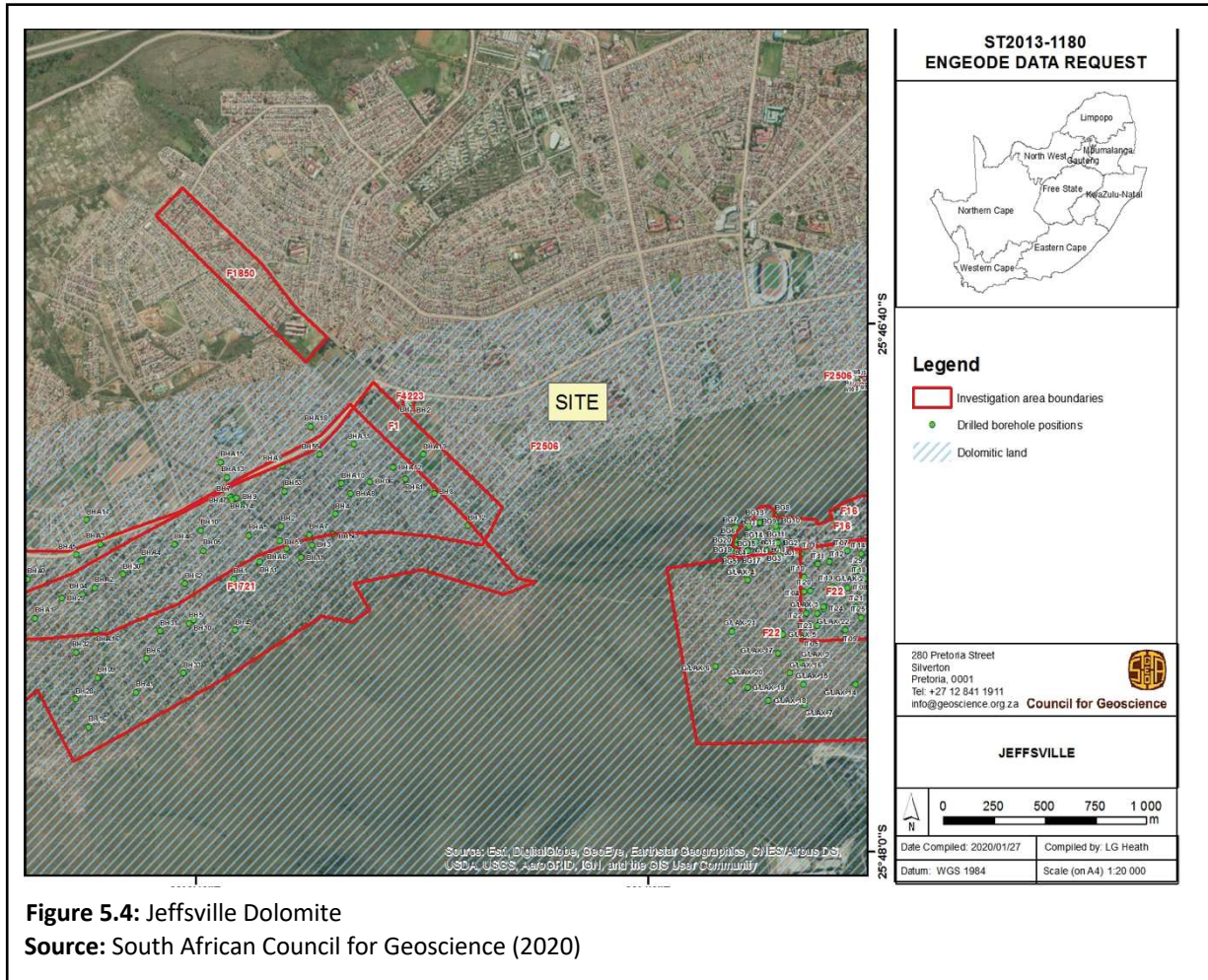


Figure 5.4: Jeffsville Dolomite
Source: South African Council for Geoscience (2020)

On 24 January 2017, a section of Jeffsville experienced a sinkhole [see figures 5.5 and 5.6] initially affecting 12 households, but the number soon escalated to 45 and then 125 [Pretoria News; SABC¹⁴⁵ News]. This sinkhole in Jeffsville is still not rehabilitated, and some dwellers desperate for housing resorted to informal means of rebuilding the area. As figure 5.7 shows, the sinkhole area is currently occupied.

¹⁴⁵ SABC is the South African Broadcasting Corporation



Children walk past a sinkhole where a number of shacks were damaged in Jeffsville informal settlement in Atteridgeville. Picture: Oupa Mokoena

Figure 5.5: Jeffsville Sinkhole

Source: Oupa Mokoena (2017)

Recently other smaller sinkholes have emerged occurred following this one. But these issues are not even deliberated on the agenda of the Forum. This, I argue, is because of the disjuncture between informality and sustainability. In Tshwane, such oversights are exacerbated by the pervasive problem that the City's sustainability initiatives are at odds with efforts of formalization. For example, Tshwane Vision 2055-the 'Remaking of the City' is not in sync with formalization process despite both claiming to pursue a similar goal of sustainability.



Figure 5.6: Post Evacuation Sinkhole Area
Source: Author (2018)

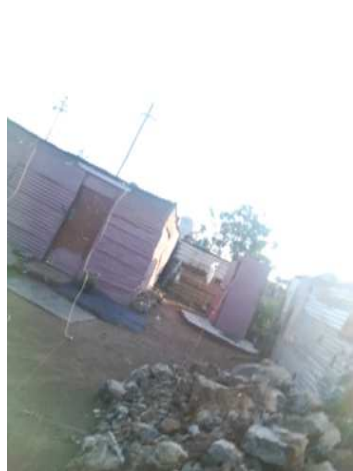


Figure 5.7: Reoccupied Sinkhole Area in Jeffsville
Source: Sam (2021)

5.5 Conclusion

While the need to adopt a pro-poor orientation is generally acknowledged, the place of informality in the City's sustainability agenda is often undermined if not ignored. For instance, the Sustainability Week Programme places little or no significance on the challenges of informal spaces (see Table 2). Such oversights call into question whether those championing urban sustainability are genuinely concerned with inclusivity.

What is clear is that the governance of new environmental agendas (e.g., climate action) should not stand in isolation from other related governance agendas like formalization. Rather there is a need for inclusive urban governance, because, as argued by Brown & McGranahan (2016), failure to incorporate the pervasive informality into urban planning and regulation mechanisms can hamper the realization of sustainable and inclusive urban development. The UNDP SD Goal 11 locates informal spaces as a key contributor to the idea of city sustainability by highlighting Upgrading of informal settlements as one of the key elements at the heart of sustainable cities and communities.

So, it is evident that the environmental inequalities experienced by the City's informal spaces deserve equal attention. Formalization is a central point of reference in my analysis of Tshwane's urban sustainability governance. Moving forward, it is essential to remember that formalization is embedded in a fragmented urban policy complex. The observation of environmental constraints in the everyday spatial practices of informal spaces is indicative of inequalities in urban environmental production, a consequence of a fragmented urban governance complex. Precisely how this fragmented urban sustainability governance plays out in the formalization of the informal settlements Jeffsville and Phomolong in contemporary Tshwane will be the key subject of my empirical analysis in the final part of this thesis.

CHAPTER 6

The Idea of Formalization: Following the policy object in Tshwane from adoption to reception

6.1 Introduction

This chapter presents my empirical findings collected in 2018 from across five divergent informal settlements in the City of Tshwane, namely; Phomolong, Jeffsville, Marikana, Spookpark and Masholaville. The presentation lays out the significant events that unfolded as the City sought to address tenure and environmental inequalities in its informal settlements through the formalization process. The idea of formalization is influenced by the Upgrading of Informal Settlements Programme (UISP), a programme with a policy objective of improving tenure security by providing formalized serviced stands to informal dwellers. During my fieldwork, I learned that, in Tshwane, the notion of a permanent stands emerged as a trend for referring to these serviced stands.

Formalization in the City of Tshwane has been a delicate process. At the beginning of my fieldwork, many informal settlements were already formalized. However, other settlements like Phomolong and Jeffsville were facing formalization uncertainties. For instance, formalization in Jeffsville was in limbo due to the City's challenges with securing adequate land for formalization. Phomolong, on the other hand, was partially formalized. While a number of informal dwellers were issued permanent stands, many others were waiting in informality, aspiring for permanency. My respondents in this study, were both the permanent dwellers and the aspiring permanent dwellers. As shown below, the permanent dweller, a socially constructed political actor, became instrumental in locating the spatial rationale of formalization, and advancing the shifting urban housing politics in the City of Tshwane. Thus, understanding the role of the permanent stands in 'the constitution of these subjects' (Hoffman, 2014), is crucial to deconstruct the politics of misrecognition in formalization. As illustrated in the next analysis in Chapter Seven, this misrecognition perpetuates the exclusion of informal spaces from the City's sustainability imaginary. This analysis is therefore structured to outline the City of Tshwane's approach to formalization and its implications on the recipients. The discussion follows a somehow chronological order to reflect the role of formalization as an ideology in housing policy, followed by how this policy ideology is institutionalized as a means for implementing formalization. Finally, the discussion looks at how this process results in formalization as a product with implications on the ground.

The first part of this chapter presents how in post-apartheid South Africa, the UISP, a housing policy objective, was negotiated through the country's complex and contentious housing tenure politics. Here I argue that the UISP emerged as a tool to shift the housing policy discourse to accommodate the changing housing politics.

In the second part of the chapter, I engage with how formalization emerged as a process for advancing the UISP policy objective at the local government level. Here I outline the institutional arrangement – meaning the context of action - under which the formalization process unfolds in Tshwane. I argue that this institutional setting has limitations. Firstly, I show these limitations through informal practices, which I claim create a decision-making space for formalization fraught with inconsistent and ambiguous instructions. Secondly, I show that whilst the main activity of formalization is to redistribute land, the urgency of land reform for formalization is nonetheless downplayed.

In the last part of the chapter, I begin to link this institutional setting to the receipt of formalization. Here I illustrate the implications of formalization on the beneficiaries thereof. I start by showing how, in Tshwane, the limited access to land for formalization hinders the UISP’s objective of mass tenure upgrading. Consequently, many informal dwellers continue to wait in limbo as the state attempts to resolve land politics.

In closing, I then turn to illustrate how, in Tshwane, the concept of permanency serves as logic to make the site and service¹⁴⁶ idea of the UISP socially acceptable to the recipients of formalization. For many informal dwellers who have been ‘waiting for the state’ (Oldfield & Greyling, 2015) to provide them with housing, permanency is a surer way to attaining tenure security. I argue, however, that under the emergent logic of permanency, we can trace how formalization becomes a tool to mobilize and re-order society to suit the state’s agenda. In this context, the idea of permanency has a binary reading: On one hand, it alludes to the permanent stand, which portrays permanency as the embodiment of transformed informality, while, on the other hand, the permanent dweller is a ‘socially derived identification’ (Taylor, 1994), utilized to frame the beneficiary of formalization as an autonomous urban informal dweller responsible for their own development. As I will show here, formalization uses the idea of permanency to shift the state’s responsibility in housing provision to the permanent dweller. This understanding reveals the governance terrain, which can be overlooked if formalization is solely viewed as a tool for tenure securing.

¹⁴⁶ “These rules relate to the provision of grants to a municipality to enable it to upgrade informal settlements in its jurisdiction in a structured way and on the basis of a phased development approach. The grant funding so provided will enable the municipality to fast track the provision of security of tenure, the provision of basic municipal engineering services, the provision of social amenities and the empowerment of informal settlement inhabitants to take charge of their own housing development” (UISP, 2004:3; UISP, 2009:9)

6.2. The rise of formalization in urban governance

Formalization has been gradually normalized as a spatial practice and imagination for inclusion into the formal urban setting. The City of Tshwane adopted its formalization programme in 2013. To date, several informal settlements have already been formalized in the City. At the beginning of my fieldwork in 2018, informal settlements like Phomolong were in the process of formalizing¹⁴⁷. Formalization emerged following the adoption of the Upgrading of Informal Settlements Programme (the UISP) in national housing policy. The UISP was introducing a new approach to tenure security which advocated the insitu upgrading. These transformations had to be subsequently negotiated within the complex housing politics in the post-democratic local government.

The first part of this section is primarily concerned with mapping out how the UISP, adapted by the national Department Human Settlements, found expression in South African housing policy. I argue that the UISP's approach of incremental tenure securing served as a government logic to entrench the idea of serviced stands in tenure security discourses. I draw from Foucault's power /knowledge nexus, which put forward that to study the technologies of power requires an analysis of the political rationality underpinning them. I use this nexus to demonstrate how the UISP's incremental approach to tenure securing became a vehicle for locating the political justification of limited government involvement in the redistribution of resources, for example removing the provision of housing structures for tenure security. I also discuss the role of the continuum model - a best practice tool used to recognize an assemblage of tenure security arrangements - in incremental tenure securing. I argue that from this tenure assemblage emerge narratives that advance the political rationale of the UISP. I close this section by scrutinizing the conceptualization of tenure security emerging from that assemblage. Here I make an argument that this conception of tenure security undermines the local interpretations to tenure security, which I locate in the social reality of the informal dwellers.

6.2.1 Shifting housing narratives and shifting politics

In post-democratic South Africa, urban transformations have been undermined by the legacies of the apartheid regime. As already discussed in Chapter Four, the apartheid land policies restricted land ownership to the minority whites. This exclusion manifested in overwhelming and persistent land tenure inequalities along racial lines. Subsequently, at the dawn of democracy, many black people were trapped in informal life and deprived of decent living environments. To step up to the democratic ideals of social inclusion and equality, the state had to reconsider some of its nation-building strategies. For de Soto (2005), having in place a social contract for the distribution of property is one of the ways toward nation-building. de Soto (2005) views equality in property rights as an enabler for inclusion to the capital market, arguing this inclusivity contributes to building a great nation. Since 1994, the state provided tenure security through the housing subsidy programme (the RDP), which prioritized a housing structure and a title deed as a form of tenure security. This programme, however, failed to meet housing demands leaving many in poor living environments without tenure security. Thus, the

¹⁴⁷ I use *formalizing* in italics to show the formalization process is ongoing

adoption of the RDP (Reconstruction and Development Programme) in 1994 to address tenure deprivation, signified a move in the right direction in line with the country's nation-building efforts. The RDP held a view that the needs to be a balance between housing provision and job creation. Thus, under the RDP, (number) millions of low-cost houses were built between 1994 and 2004 (Turok & Scheba, 2019). The RDP was influenced by the capital subsidy funding model for low-cost housing provision, adapted from the World Bank. This state-funded free-standing housing, commonly known as the RDP house, is a free-standing 50 square meters house [see figure 6. 1]. The beneficiaries of the RDP house were also issued with title deeds. In this way, the RDP house was addressing both informality of land tenure and housing tenure. Nonetheless, by the end of the decade, many were still waiting for tenure security, and informal tenure was also gaining momentum.



The 2004 introduction of the UISP to the housing policy discourse in South Africa cities, including Tshwane, was accelerated by globally influenced urban governance trends that associate the mushrooming informal settlements with an urban crisis. But it was not only a response to this slow pace in housing delivery (NUSP, 2015). As noted by Lemanski (2020), this response was an implicit acknowledgement of the state's inability to meet the growing demand for housing infrastructure. The UISP follows World Bank's housing policy recommendations that promoted 'self-help' idea of site and service as an alternative (Abbott, 2002, p. 306), promising an efficient approach to tenure securing. This emphasis on site and service, I argue, was also transforming the housing politics in South Africa. The UISP was also sustaining the mainstream view to securing tenure, such as those held by de Soto. In 2005, following the adoption of the UISP, de Soto visited South Africa. During his visit, he re-emphasized his tenure views in the context of South African cities by stating that most people remain

excluded and should be brought into the legal tenure system (Toulmin, 2009). However, understanding the UISP in the context of informal spaces in the City of Tshwane presents some limitations. Informal settlements are generally-spatially- characterized by land and housing informality. This implies that informal settlements are generally understood as facing dual tenure insecurities - of both land tenure and housing tenure. The UISP's phases one to three places emphasis on land tenure insecurities of informal dwellers. Land tenure rights are essential in South Africa, particularly given the country's vile apartheid policies, which deprived the black population of land ownership. I, however, contend that reducing tenure insecurity to land deprivation misrepresents the historic narratives underlying tenure insecurity, of which housing deprivation and misrecognition of identities were a key factor.

Nonetheless, in South Africa UISP's approach to tenure securing was justified as relevant to address the massive tenure deprivations:

"In South Africa, many people have been waiting for 20 years or more for a subsidy, without any improvements in their tenure security"[NUSP, section 7: 13].

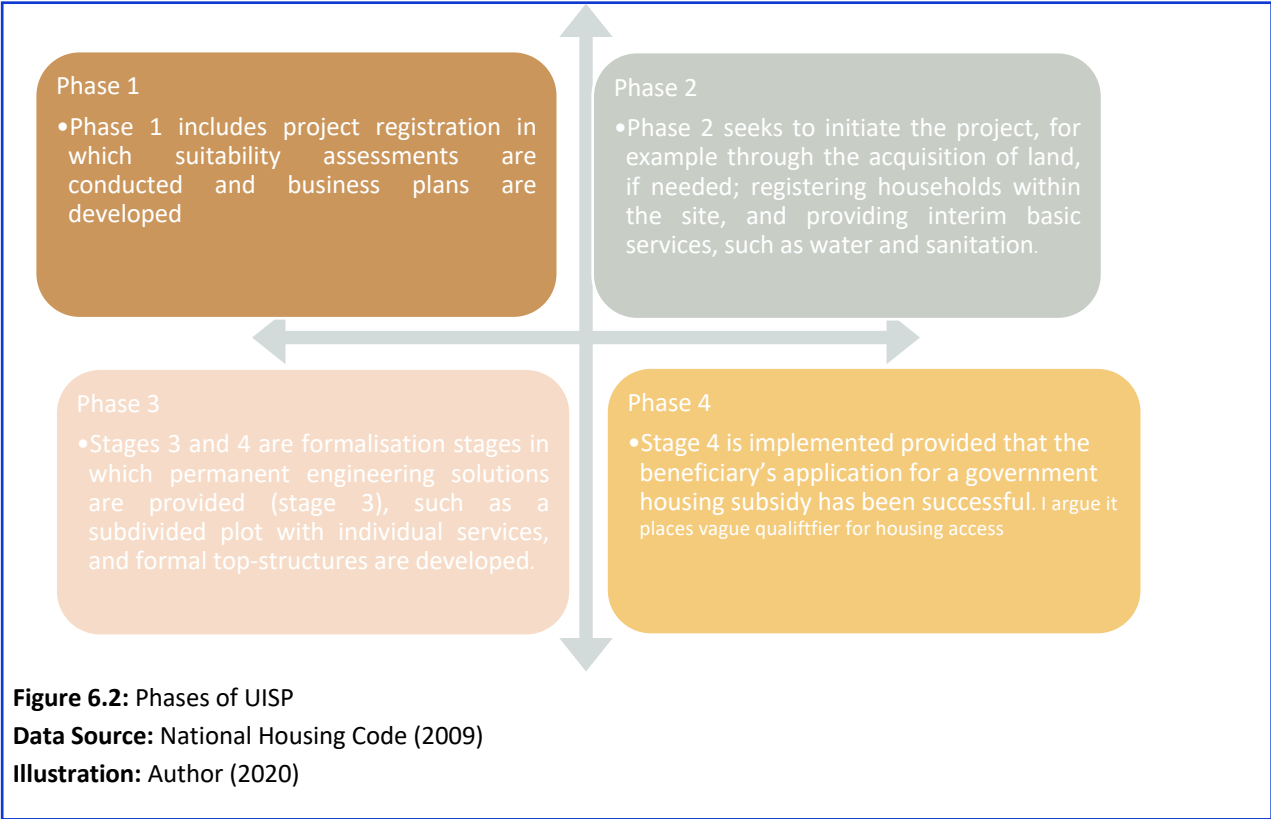
"Focusing policy and practical attention on getting everyone into a registered title, which would take decades to achieve." [NUSP, section 7: 8].

Thus, the UISP was proposing alternative tenure securing approach. This model approaches tenure securing in four phases as shown in figure 6.2. This approach seems to suggest that provision of serviced stands takes precedence over the provision of housing units¹⁴⁸. I argue that this tenure securing approach undermines the significance of a housing structure in the quality of life. However, as can be seen in figure 6. 4, poor access to basic services such as water, sanitation and housing, equally influence the quality of life in informal settlements. This argument does not seek to take away from the positive implications of basic services like water and sanitation on the quality of life. However, a physical housing structure can influence physical, mental and social health (Weimann & Oni, 2019). As already discussed, many informal settlements are spaces of vulnerability and poverty due to the lack of services and proper housing [see figure 6. 4]. Interventions against informality are generally with the objective of addressing these injustices. Thus, improving access to services without the provision of proper housing, as suggested by the Formalization, perpetuates the marginalization of informal spaces and also justifies the burden of informal housing tenure. I further argue that the approach of formalization to tenure glorifies informality by making assumptions that portrays a title deed without a house as adequate for habitability, suggesting that a housing structure does not play a role in the quality of their living environments

¹⁴⁸ *Housing Consolidation: Beneficiaries of this programme will only receive access to land, basic municipal engineering services and social amenities and services. To qualify for housing assistance benefits, such as registered ownership and a consolidation subsidy, beneficiaries need to comply to the requirements of the relevant programmes (UIPS,2009:15)*

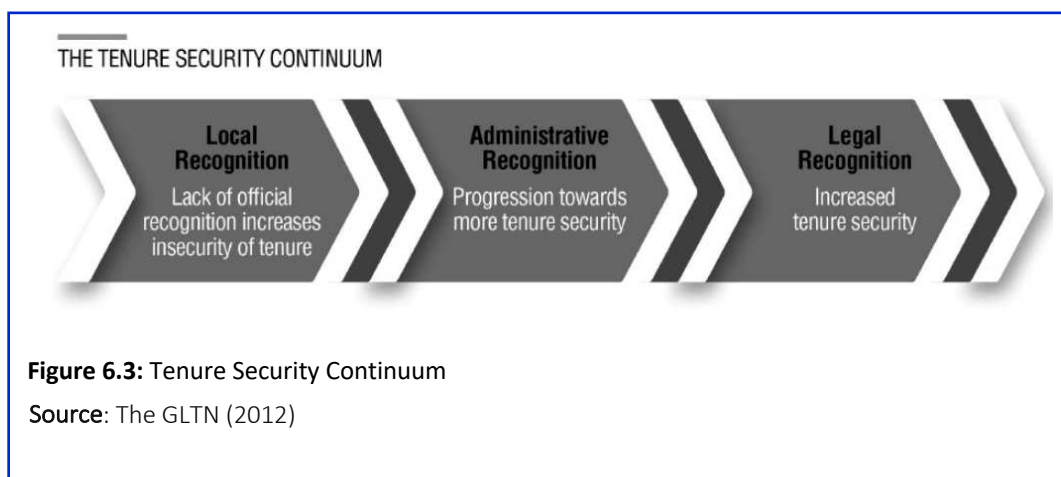
6.2.2 Framing the rationale for securing tenure incrementally

As I already illustrated, policy shift from the RDP to the UISP was not a voluntary episode. The RDP’s dual approach to tenure security - focusing on both housing and land deprivation - was not coping with meeting the mass housing demands. According to Palmer (1998), tenure securing through titling and registration can be an expensive exercise for governments, hence, to mitigate these cost implications, governments, at times, pursue other cost-efficient means for securing tenure. Those measures may include, for example, phasing the tenure securing, by distinguishing between different levels of the title (Palmer, 1998). Similarly, the UISP’s incremental approach to securing tenure introduces various stages of conferring tenure security [see figure 6. 2]. This process of tenure securing is what distinguishes the UISP from the conventional approaches, including that of the RDP. The RDP focuses on the simultaneous delivery of a house, and a title deed as the conventional source of tenure security (Payne et al., 2009). Critics of the dominant tenure securing approach argue that it suppresses the possibilities for improving tenure incrementally because it disregards a whole range of existing tenure arrangements (see du Plessis et al., 2016). I argue, however, that this critique segues the discourse in ways that seek to normalize the UISP’s incremental tenure securing approach. Thus, it can be argued that the incremental tenure securing is the mentality of the UISP.



The incremental strategy to tenure securing is informed by the continuum model [see figure 6. 3]. To its proponents, the continuum model is a best practice that offers a powerful and practical alternative to

the dominant approach of tenure security (GLTN¹⁴⁹, 2016). Scholars such as Peet (2009) criticize the role of best practices in rationalizing of power through policy rhetoric. For Peet (2009), policy discourse is laden with carefully justified and organized statements that serve the economic and social interest of the powerful groups.



- **Policy rationale of the UISP**

Similarly, Birkland (2016) reminds us that in policy design, the process of social construction is used to delineate issues in ways that favor the solutions proposed by the powerful interest groups. These arguments, I contend, are helpful to illuminate the spatial rationale of the UISP. To further rationalize the concept of the serviced stand, the UISP problematizes the poor quality of life in informal settlements as deriving from the lack of tenure security. This rationale, in a way, subtly shuts off the state’s responsibility in housing delivery from the housing policy discourses. Consequently, these discourses of power are diffused in policy as best practices. I argue that the continuum, as a best practice, seeks to justify the limited levels of government intervention in informality. It does so by entrenching the idea serviced stand and a title deed as opposed to a house and title deed. The UISP suggests that this poor quality of life derives from tenure insecurity inherent in informal settlements:

“One of the challenges facing informal settlements is the insecurity of tenure. Without tenure security, it is difficult, if not impossible, for people in informal settlements to get access to basic services, small scale finance and public investment in infrastructure like water services.”[NUSP, section 7: 11].

The UISP further problematizes the tenure insecurity of informal settlements as a hindrance for state intervention in informal settlements:

¹⁴⁹ The Global Land Tool (GLTN) is an initiative of the United Nations Habitat.

It is an alliance of international partners contributing to poverty alleviation through increased access to land and tenure security for all. The GLTN develops, disseminates and implement pro-poor, gender-responsive land tools that contribute to land reform, good land governance, inclusive land administration, sustainable land management, and functional land sector coordination (<https://glt.net/access-to-land-and-tenure-security/#>)

“In many places, local authorities are reluctant to provide these services unless a township is established, and title deeds issued. One of our major challenges is to make sure that tenure security is sufficient to access these benefits”[NUSP, section 7: 11].

This no tenure no service attitude is problematic in two ways. First, it demonstrates how power is exercised through knowledge, as broadly argued by Marxist scholars including Foucault. Furthermore, it seems to shift the blame of poor environmental conditions to the informal dweller. Nevertheless, the site and service tenure securing trend is currently observed in housing policy in the City of Tshwane. Since 2013. Formalization emerged in the City of Tshwane as a prominent governance process for transforming informal settlements. Through formalization the city has been extending tenure security by issuing title deeds and basic services to owners of shacks. What this means is that a hegemonic way of imagining space, has found expression in local urban governance.

	LOCAL recognition	ADMINISTRATIVE recognition	LEGAL recognition
	No official recognition	Official recognition	Official recognition
Level of tenure security	Low tenure security	Progression to more tenure security	Increased tenure security
Form of tenure	Perception of tenure		Title deed
Approach	<p>-Local arrangements introduce some kind of security and legitimacy at grassroots level that agencies of the state have not been able to create.</p> <p>-These local practices could include:</p> <ul style="list-style-type: none"> ---Sales, transfers and bequeathing of land, shacks on land, or both; ---Verbal and written evidence of occupation; ---Perceptions about tenure security; 	<p>-Administrative recognition uses instruments that may arise from policies or administrative practices to improve tenure security.</p> <p>-Administrative recognition can provide tenure security through:</p> <ul style="list-style-type: none"> ---Categorisation of the settlement; ---Initiating an enumeration process; ---Preparing a list or register of occupants; 	<p>-Legal recognition uses a legal procedure, in terms of a law, often a planning law, to grant legal status to an area.</p> <p>-Legal recognition may work in combination with administrative recognition</p>
	-Local recognition refers to the settlement level practices that have developed into norms over time.	-When a decision is taken to upgrade a settlement, interventions can be made that do not need to have a legal origin.	-It usually results in declaring the area in terms of this law (a settlement area, an area zoned for informal housing).

Table 6.1: Sources of Tenure Security

Data Source: NUSP (2015, Section 7)

Graphics: Author (2019)

6.2.3 Problematising tenure security interpretation

Undermining the housing structure from the process of securing tenure brings to question the definition of tenure security. Tenure security is generally understood in terms having legal rights to property that protects occupants from threats of eviction (NUSP,2015; Arnot et al., 2011). As already indicated in chapter 6.2.2, the UISP's incremental approach to securing tenure works from a perspective that acknowledges the spectrum of the sources of tenure security, other than the title deed [see figure 6. 3]. This perspective mirrors Palmer's (1998) concept of total security enjoyed by a person, which he posits as the total sum of security from various sources, including the community, polity, the legal system, and coercive organizations. For Palmer, no other source of security is of more value than others. Similarly, the UISP's incremental tenure securing approach also regards the spectrum of tenure security sources, including the local arrangements [see figure 6. 3]. According to the UISP, local arrangements include perceptions of tenure security, which introduce some kind of security and legitimacy.

However, the NUSP's definition of tenure security is self-contradictory as it fails to reflect this spectrum of tenure sources. NUSP defines tenure security as follows:

"Tenure security is about more than not being evicted, which is the definition of passive tenure security, so we need to look at what active tenure security means" [NUSP, 2015: section 7:2].

This definition is influenced by the GLTN's expansive conception, which regards security of tenure as constituted by active and passive aspects. According to the GLTN passive tenure security means being free of the risk of being evicted from the land ((UN-Habitat and GLTN, 2012). Generally, the title deed is the source of this high-level tenure security. The title deed confers legal tenure recognition, which is mainly regarded as a more secure form of tenure [see figure 6. 3 and table 6.1]. While the UISP seems to view the title deed as a source of passive tenure security, NUISP also seems to suggest that passive tenure is rooted in local arrangements, especially the perceived tenure:

"In South Africa, we have laws and a Constitution which offer protection against eviction. There are procedural requirements in law, and if these are not followed, an eviction would be illegal. Recent Constitutional Court judgements also show that municipalities must engage meaningfully with people under threat of eviction and that attention must be given to the provision of alternative accommodation. All of these provide passive tenure security. Municipalities should be aware of the tenure security that the Constitution and the case law confer on informal settlement residents. Current residents in informal settlements, regardless of the lawfulness of their occupation and irrespective of how they are assessed and categorized, possess a range of substantive and procedural protections that impose obligations on municipalities, private landowners and the occupiers themselves"[NUSP,2015 section 7:3].

This downplaying of the role of the title deed as a source of tenure security refocuses attention towards active tenure security. For the UISP active tenure security raises the critical issue of why tenure security is important (section 7.10). The GLT defines active tenure security as the ability to perform economic

transactions, such as buying or selling, on a specific piece of land (NUSP, 2015: section 7). In essence, active tenure security resonates with de Soto's (2000) economic views on a title deed as a promoter of inclusion to the capitalist market.

Thus far, the UISP's definition of tenure security has failed to reflect the role of local arrangements [see table 6.1], particularly the perception of tenure. Instead, only the passive tenure and active tenure are shown in the definition. This oversight, I argue derives from the UISP's contrasting views on the implications of perceived tenure. On one end, the UISP recognizes the contribution of the people's relationship to tenure security:

"Tenure is the set of relationships with respect to housing and land, established through statutory law or customary, informal or hybrid arrangements. Tenure is not simply about the law, or about legal forms of holding land or housing. It is about the relationships that people have to land or property" [NUSP 2015, section 7: 3]

On the other, this perception of tenure is not admissible as a stable source of tenure security. As highlighted by (NUSP, 2015), higher perception cannot be the only thing defining the security of tenure as evictions are still eminent even when perceptions are higher.

This discounting of the perception of tenure as a source of security resonates with de Soto's sentiment which dismisses informal tenure sources, such as perceived tenure, as a myth. In de Soto's view, only formalized tenure security matters (de Soto, 2010). However, dismissing perception as a source of tenure security undermines social reality. While active and passive tenure security are both products of state intervention, in this context, both are provided through legal recognition and administrative recognition procedures of the formalization process. Perceived tenure security, on the other hand, is constructed from the lived experiences of informal dwellers. The majority, if not all, informal settlements are founded and sustained on perceptions of tenure security, emergent as the people forge relationships with the land, based on various personal and structural reasons. Palmer (1998) highlights a variety of sources of tenure security, including polity based on the strength of numbers, which can have implications on the perception of tenure security:

"When settlements achieve a critical mass, governments are forced to concede their permanence" [Palmer, 1998: 85].

The large structure of the settlements strengthens perceived tenure security as it diminishes the risk of eviction by governments. The NUSP highlights the implication of high population numbers on the perceived tenure:

"For some communities, the location and the size of their settlement gives a heightened sense of perceived tenure security" [NUSP, 2015].

Jeffsville informal settlement, for one, was founded and sustained on perceived tenure deriving from its large community population. The Jeffsville dwellers named the settlement after one of its founders,

Jeff Ramohlala (Monson, 2015). It is alleged that Ramohlala together with some desperate and tenure deprived long-term backyard dwellers¹⁵⁰ of Atteridgeville, spearheaded the land invasion that resulted in Jeffsville. At its foundation in 1991 Jeffsville had about 280 homes, many of whom were at that time 'backyard dwellers' in the Atteridgeville area. The land on which the settlements is built was the property of Denel¹⁵¹. By implication, this posed a high risk of evictions. Nonetheless, with time the settlement's population grew into large numbers. In 2018 the settlement was estimated to have 2 557 informal structures (City of Tshwane, 2013b).

Phomolong, on the other hand, is arguably founded on administrative tenure [see table 6. 1] since the settlement emerged from council processes. The settlement was established in 2002 when the City Council relocated about 280 households from Marabastad¹⁵² to ERF 34041 in Mamelodi East, a township in the east of Tshwane. The land demarcated for those relocated from Marabastad is owned by the City of Tshwane. A City official close to the process commented that:

"I was there, I actually relocated the people of Marabastad"[Interview: city official 1, July 2018*].

It is alleged that some of the original people went back to Marabastad and some sold their stands As noted by one of the Marabastad individuals¹⁵³:

"Most of the people that are here I don't know, they did not come with us" [Interview Madevu, July 2018].

Nonetheless, Phomolong has become one of the most populous informal settlements in the City. The settlement has since expanded to 2 666 informal structures (City of Tshwane, 2013b). The ward councillor also alluded to these large numbers:

"During the last shack marking process, we accounted for 12 000 informal structures"[Interview: Ward Councillor, July 2018].

The expansion of Phomolong was also driven and sustained by perceived tenure security. Following the settling of the Marabastad occupants by the City in Phomolong, many others arrived from elsewhere and invaded the adjacent piece of land owned by Transnet¹⁵⁴. Though Transnet's land posed a high risk of eviction for Baipeyi [meaning 'unlawful' occupiers], they nonetheless continue to draw their tenure perception from community solidarity. As recalled by Macheckers*, a former resident of Phomolong relocated to Marikana, they were constantly under threat of eviction:

¹⁵⁰ Back Yard dwellers are individuals who inhabit shelters are built in the back yards of homes, mostly in urban areas, and rented out to tenants for an income.

¹⁵¹ Denel is the arms producing entity of the South African National Defence Force (SANDF)

¹⁵² Marabastad is one of the oldest formal settlements in the city center of Tshwane. During the apartheid era the black population was forcefully relocated from the settlement [see chapter 4].

¹⁵³ Marabastad people in this context refers to a group of people relocated by the City from Marabastad. They were the first inhabitants of Phomolong.

¹⁵⁴ Transnet is a large rail, port and pipeline parastatal company in South African.

“One day when we came back from work, we were told that the red-ants were there during the day: Do you remember Mafifa? The red-ants¹⁵⁵ demolished some shacks. Then the men had to stay up and guard the shacks so that red-ants don’t demolish them”*[Interview: Machekers*, August 2018].

Perceived tenure security reveals the everyday struggles of land tenure deprivation faced by the informal dwellers. Thus, omitting the perceived tenure in the definition of security undermines this social reality of informal occupancy. The UISP positions as a progressive alternative to the dominant approach to tenure securing. However, its definition of tenure security continues to be framed within narrow dominant approaches to tenure. As I demonstrated, the definition of tenure security only reflects active and passive tenure. I argue that the definition of tenure security needs broadening, mainly also to reflect the triple-edged challenges – social, economic, environmental – facing informal spaces.

In sum, the UISP’s incremental approach to tenure securing shifts the policy discourse by overshadowing the tenure securing approach of the RDP, which considered both the title deed and the housing structure simultaneously. This analysis, however, shows some contradictions. In the City of Tshwane, the formalization process seems to largely embrace the title deed without a housing structure. Since the inception of its formalization programme, the City has distributed title deeds to many informal dwellers. Such contradictions need to be accounted for if we are to precisely analyze the outcomes of formalization. Therefore, the proceeding section seeks to place focus on some of the prominent contradictions in the formalization process.

This section provided a Marxist perspective to critique the rationale of the UISP. I problematized how UISP frames tenure insecurity only in terms of land deprivation. This I argued reflected the UISP logic of incremental tenure securing sought to justify the state’s limited intervention in addressing tenure challenges in formals spaces.

¹⁵⁵ The Red-Ants are subcontractors used by local government to facilitate forced evictions. They are named after the red coloured overalls they wear.

6.3 The Institutional arrangement for the Governance of Formalization in Tshwane

As discussed in section 6.2, formalization emerged in Tshwane as a prominent governance process to advance the policy objective of the UISP – a targeted policy idea with the primary goal of transforming informal spaces through improving tenure security. In this way, formalization can be understood as advancing the policy objectives of the UISP at the local government level. I also mentioned that UISP proposes the incremental tenure upgrading approach¹⁵⁶ (NUSP, 2015). In keeping with this, formalization can also be understood as the process of operationalizing the UISP, which sets the framework that guides the tenure securing process. This understanding of formalization as a process can also be seen from the definition of formalization *“as the process of changing an informal settlement into a formal (legal and officially approved) settlement”* (NUSP, 2015, p. 23).

To implement the formalization process, the UISP advises local governments to establish formalization programmes which will guide how they select projects and carry out the tenure securing process (NUSP). The City of Tshwane adopted its formalization programme in May 2013. When announcing this programme, the mayor of Tshwane, Kgosientso Ramokgopa, also listed informal settlements (projects) targeted for formalization and other related activities to be undertaken [Record newspaper, month 2013]. In this context, the formalization programme can be viewed as a space of interaction between various local actors – political, technical and community – where numerous decisions about the formalization process are undertaken. Ostrom (in Sabatier, 2007) conceptualizes these social spaces of interaction as the action arena [see figure 6. 5]. As highlighted by Ostrom, various factors, including the rules of interaction, have repercussions on the action arena [see figure 6. 5]. As contended by North (2016), institutions are defined as rules and norms designed to delineate how actors behave in a given environment, reduce uncertainty of human exchange in decision-making spaces. Rules have implications on the action arena. They determine the institutional setting, defined as the context within which individuals act (Schlager in Sabatier 2007). As noted by Ostrom, the nature of the institutional arrangement will determine the nature of the setting for governing or managing resources.

¹⁵⁶ I should mention that, in this context, the word upgrading is used interchangeably with formalization (NUSP, 2015).

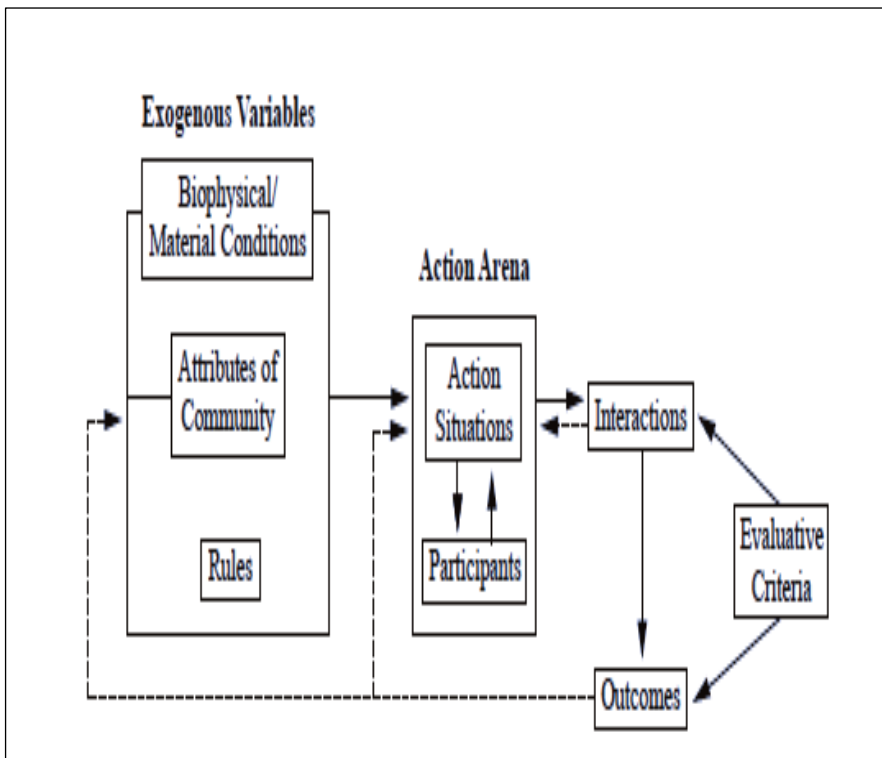


Figure 6.4: Illustrating the Action Arena

Source: Adapted from E. Ostrom, Gardner & Walker (1994:37)

- The limitations of the institutional arrangement of formalization

Consequently, as is the case in Tshwane, the formalization process is dependent on institutional memory. In this context institutional memory refers to a collective set of experiences and knowledge held by a group of people within an organization (Brownlie, 2017). Some city officials in Tshwane alluded to this institutional context by remarking that:

"We don't have a formalisation policy basically,... eeeerh, we don't have. All of these I learned day by day as I learn to understand informal settlements. It is basically experienced from when you go to those people who are working in the region," [Interview: City official 2*, July 2018].

"It is actual us who knows what going on the ground. So, for the planners to be able to plan properly..., actually when she was appointed, she had to bring here so that I can induct her" [Interview city Official 1*, August 2018]

I argue the institutional memory supporting formalization in Tshwane exemplifies an informal practice. Considering that knowledge held by people is subject to various interpretations. Consequently, as I will show in section 6.5, this can open up space for inconsistent actions and unclear instructions in the formalization process. As can be seen in box 6.1 below, formalization process involves the interaction of multiple actors tasked to perform various forms of activities.

Once the City has identified an informal settlement as a project for formalization, numerous planning and operational activities come into effect.

Planning related activities in formalization may entail the selection of land and the establishment of the township layout plan¹. These activities fall under the mandate of the housing officials at the head office of the City of Tshwane. A city official elaborates:

“If there is an informal settlement to formalize, we appoint a service provider to submit an application. We then manage that process up until that application is approved. Once approved then, together with the regions, we move people in then the services will come later. We do the services together with the implementation section. After that, we do the proclamation of the township, after proclamation it gets registered we then people of the title deeds, simple” [Interview city official 3*]

Operational activities, on the other hand, take place on the ground, in the informal settlements. Some of the operational activities in the formalization process may include enumeration, re-blocking, relocations and rollover upgrading [see box 6. 1]. The housing officials at the regional level are mandated to undertake the operational activities. As mentioned elsewhere (in Chapter 4), the CoT is geographically arranged into seven regions. Each region has its implementing team for formalization. The City appoints various external contractors to support the implementation team. One of the key activities of the contractors is to assist with the relocations in instances of roller upgrading [see box 6. 1]. For example, the contractors help informal dwellers that are relocated to dismantle their shacks, transport them to new sites and assist with the reassembly. The City’s contractors also assist with the physical demarcation of stands, an essential activity in the re-blocking process. The ward Councilor of the formalizing settlement also forms part of the implementation team. In particular, the Councilor is tasked as a liaison between the City (officials) and the people. In this role, the Councilor mainly communicates the formalization process to the community (the recipients of formalization).

Box 6.1: Formalization Process Cycle

In the City of Tshwane, the institutional setting for formalization exemplifies a space of inconsistencies, which I argue derives from the rather ironic overreliance on informal practices for the implementation of formalization. The OECD¹⁵⁷ identifies working routines, social codes of conduct and customs as some examples of informal rules. The OECD also reminds us that although informal rules are implicit, they are an important element in governance. This importance of informal rules is demonstrated by Li Pernegger (2021), who argues that informal practices and their effects can influence governance in ways that may consequently undermine or uphold democratic ideals. In particular, Pernegger illustrates that when faced with immediate governance pressure – and in the absence of formal practices – urban actors rely on informal practices to achieve set objectives. In Tshwane, there is some

¹⁵⁷ The Organisation for Economic Co-operation and Development (OECD) is an international organisation that works to build better policies for better lives. Our goal is to shape policies that foster prosperity, equality, opportunity and well-being for all

evidence of the use of informal practices to advance the formalization process. The presence of informal practices in formalization arguably stems from poor institutional development under the UISP. While the UISP is a policy object, it nonetheless falls short on explicitly guiding how tenure is secured during the upgrading process (NUSP,2015). Instead, the UISP encourages cities to use their own initiative and think out of the box when approaching formalization (NUSP, section 7). I argue that the UISP directive normalizes reliance on informal practices. Box 6. 2 below, illustrates the activities of formalization. At times these diverse interactions and decision making, at times, take place under high pressure circumstances.

- City politics and institutional setting of formalization

The CoT's formalization programme sets scale and pace for the formalization process [see chapter 4]. As discussed in Chapter Four, the formalization program in Tshwane falls under the mandate of the City's political actors. I argue that, driven by their political goals, political actors may, at times, omit to envisage the potential technical challenges for implementing the formalization program. As seen in section 6.5, decision-making under rushed circumstances can encourage neglectful and unauthorized practices, particularly if done under unclear guidelines. Consequently, some of the key objectives of formalization relating to the living environments of informal spaces are bypassed, thus compromising the recipients of formalization.

Enumeration: *is a process of surveying the community. It usually includes shack counting and numbering, administration of a questionnaire to capture all the relevant information about each household and mapping of the settlement to identify assets and risks. It is best practice to involve community members in gathering the information and capturing the data. Community-driven enumeration exercises constitute a resourceful and empowering process of data collection and profiling informal settlement demographics and assets.*

Re-blocking: *This is an initial interim intervention to better organise the informal settlement layout so that emergency vehicles can enter and basic services can be introduced. In dense and poorly laid out informal settlements, reblocking can enable later in situ upgrading.*

Rollover upgrading: *This approach involves moving households off the land into a temporary relocation area (TRA) nearby, dismantling the shacks, then developing the site with formal sites and services (and sometimes houses) and allowing the same households to move back. Rollover upgrading is required where land has to be rehabilitated, for instance through major earthworks.*

Data source: NUSP, section 1: 23

Box 6.2: Operational Activities in Formalization

The limitations in the institutional setting of formalization can also be understood through the City's inadequate land reform for formalization, which I argue impacts the successful implementation of the formalization process. Laia et al. (2019: 804) regards land is the fundamental for human habitation. A City official also raised these sentiments in the context of formalization:

"Land is an issue and will always be an issue" [Interview: city official 2*, August 2018].

In South Africa, the long history of land deprivation is a key factor in the tenure insecurity of informal settlements. Although the formalization process mainly aims to address these land deprivations, in the City of Tshwane, the insufficient availability of land for formalization is overlooked. These land issues challenge formalization from inception. According to NUSP, the projects identified by cities for formalization must be categorized accordingly based on their potential for to be upgraded in situ immediately or in the future or be relocated [see table 6.1]. These categories guide the type of formalization activity to be undertaken in each settlement. However, as I shown in section 6.4, land is the fundamental determinant of the success or failure of those interventions. Thus, the implications of land on the action arena for formalization needs to be paid some attention. Action arenas, according to Ostrom (1986), offer a framework through which we can analyze, predict and explain outcomes emerging from a specific institutional arrangement. Thus, by discussing the impact of informal practices and land shortage on the nature of the institutional setting in Tshwane, this section is setting the scene for the analysis and the explanations in the last two sections of this chapter.

	Settlement Category	Tenure Security	Development Pathway
A	Conventional formal full upgrading	This is the conventional approach to tenure, where formal township establishment leads to registered title.	Rapid formalization. Opportunity to introduce some administrative security mechanisms along the way.
B1	Incremental full upgrading	Tenure in this category can be incrementally secured using a range of options.	Incremental development led by the provision of basic services and leading either to eventual formalisation or other permanent settlement solution.
B2	Deferred relocation	Provide for recognition of the right to be relocated in future and;	-Provision of interim/ temporary basic services, but not leading to eventual formalisation or permanent settlement. -Relocation will occur when and if a suitable relocations site is obtained and developed and provided livelihoods and other relocations impacts are acceptable.

C	Immediate relocation	Tenure should be secured at the relocation destination on a full, incremental or interim basis depending on the nature of development that takes place there	-
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Table 6.2: Categories of Formalization
Data Source: NUSP, (2015)

6.4 Land for Formalization: A Challenge for the City's Formalization Programme

"Without land, we can do or plan nothing for human habitation" [Laia, Chaua & Lorneb, 2019].

Formalization process in the City of Tshwane unfolds within these complex and persisting land politics. Chapter Four fleshes out how the genesis of urban spatial informality, and by implication tenure insecurity, can be located in the country's historical land politics. These land issues have spilled into the formalization process, here I argue they create a difficult operational space for the implementors of formalization. The distribution of demarcated stands and the relocations of households are some of the fundamental activities in formalization in Tshwane. Without adequate access to land, these activities are stalled, consequently sustaining the tenure insecurity status quo in informal settlements. These structural constraints, I argue, contradict the rationale that seeks to position the UISP as a more efficient means to tenure securing.

To explore these land contradictions, I draw from the formalization encounters of two informal settlements in the City of Tshwane – Phomolong and Jeffsville. Here I show the double-edged impact of unresolved land issues on tenure security. In one instance, they perpetuate tenure insecurity by excluding entire settlements from the receipt of the formalization policy. In the second instance, they create partial formalizations which leave households within the same settlement with different tenure structures. I argue that both these instances reveal that formalization under these land conditions polarize society as it splits the land tenure struggles of informal dwellers. These social changes not only perpetuate marginalization across living environments, but it also creates class differences within and across various settlements in the City.

6.4.1 The impact of founding land conditions on formalization

The founding land conditions of each informal settlement are a significant aspect of the tenure securing formalization process. Most informal settlements are founded on poor land conditions, which I argue derive from land politics. In South Africa informal tenure is generally acquired through occupation of vacant land. As hinted by a community leader in Phomolong informal settlement, this act is instigated by deprivation and exclusion from the distribution of land:

“Our people are desperate for land, so when they see a piece of vacant land, they invade” [Interview: Community activist, July 2018].

This tenure desperation misleads the land selection strategies of the prospective informal dweller, leading many to settle under land conditions not suitable for human habitation. A community activist in one informal settlement also alluded to this:

“At that point, we don’t even think about the soil condition” [Interview: Community activist*, July 2018].

As I already illustrated, some informal settlements in the City of Tshwane, such as Jeffsville, were established on unsuitable land conditions. At intersection with these founding land conditions the formalization process is challenged in ways that undermine the objective of the UISP.

One of the guidelines of the NUSP is that once cities have identified projects for formalization, they should be categorized accordingly [see table 6. 2]. In Tshwane, Phomolong and Jeffsville were both earmarked as projects for formalization. However, for Jeffsville, the land conditions dwarfed its formalization prospects. Jeffsville is developed on dolomitic land, which is prone to sinkholes. Consequently, since 2016 the settlement has experienced recurring sinkhole incidents. The 2015 sinkhole incident was the most prominent. Approximately 45 households which were affected by this sinkhole had to be relocated to another area in the City. These land-related vulnerabilities are ongoing, with other sinkholes occurring well into 2020. Based on the recommended formalization categories presented in table 6.2, a vulnerable settlement like Jeffsville needs immediate relocation. In 2018 a city official indicated that there were about 4 000 households that should be relocated from Jeffsville.

“So, in our relocation programme, we have it that Jeffsville must be relocated. Unfortunately, for us to remove those people, we need a big chunk of land. And the western side of the City, unfortunately, we do not have too much land available.” [Interview: city official 1*, August 2018].

However, these relocations were halted pending the land challenges in the City. Consequently, the people of Jeffsville continue to wait and in hazardous conditions.

The formalization process in Phomolong is also riddled with founding land complications. Although there are some land-related environmental concerns in some sections of Phomolong, the land challenges to formalization mainly arise from the overcrowding. The City initiated the formalization

process in Phomolong in 2014. The settlement was categorized for incremental upgrading [see table 6.2]. However, in 2018 the formalization process in the settlement was far off from complete. The tenure securing process in Phomolong followed the continuum model approach. To kick start the process, existing local arrangements were acknowledged, as recommended by the NUSP. One of the first activities was to identify the legitimate owners of the informal structures. Thereafter, the structures were accordingly enumerated. In this case, stickers were placed at the front of the informal structures. The next main activity was the redesign of the township layout plan. Box 6.2 is a summarized township establishment process narrated by city official 3*, a planning official at the City of Tshwane. The re-blocking activity explained in Box 6. 1 is a large part of this process, which oversees new stands being demarcated. The locals generally refer to these demarcated stands as permanent stands.

Phomolong, like most informal settlements, is overpopulated with many shacks built haphazardly and in close proximity to each other. Therefore, given the unbalanced ratio between the settlement's size and the land area, not all households eligible for in situ upgrading were able to be allocated stands. Consequently, this necessitated the out-relocation of a large number of households:

"We had to move other people to [Ward] 22¹⁵⁸.... 310 households were moved to Ward 22. The ones formalized here are 466. What is happening now is that we need more space. You see when standing here, you can see that the stands are there and the streets are there"
[Interview: ward Councillor, July 2018]

However, this development was minuscule. More out-relocations were still needed given that, as indicated by the ward councilor, the settlements had over 12000 informal structures.

"You see now we need relief land to move some of the people and thereafter we can clean up and properly start packing new stands, can you see we have already done up to here, so where will we take these ones if we remove them"[Interview: Ward Councillor, July 2018].

Thus, to accommodate the next round of relocations, another vacant piece of land owned by the City, about 3km from Phomolong, was identified. However, relocations to this transit site, which the people named Spookpark¹⁵⁹, received a mixed reaction. While some were hesitant, the majority of people, like Mamtn*, were willing and waiting to relocate to Spookpark.

"We don't know what is going on the side of the municipality. Because they initially gave us stickers showing that we are going to relocate, but that never materialized. They promised us that before the end of July we would have moved. We don't know what brings about the delay. Stickers were given some time ago- I think around February this year. When they gave us the stickers, they told us we were moving that same week. It has been seven months now. We are ready to move; we want to move" [Interview Mamtn*, July 2018].

Most, if not all, of the people in Phomolong desired better tenure security and better living conditions. Nonetheless, for some, Spookpark did not evoke a similar sense of tenure perceptions as Phomolong. I argue that most of the residents had already formed negative perceptions about the land in

¹⁵⁸ Spook is about 4km from Phomolong.

¹⁵⁹ Spookpark meaning Ghost Park, because of its proximity to a nearby graveyard.

Spookpark. In turn, those misperceptions yielded a weak people-land relationship. The implication of misconceptions on the land-people relationship is also acknowledged by the ward councillor:

"In the beginning, people were resisting relocation because they were worried about the relocation areas. Because others were feeding them wrong information about the relocation areas. They did not know the aim of councils. It's because maybe they thought it not be a comfortable place. But now that they started to realize that it is habitable spaces. For example, those we moved to [Ward] 22 are starting to get water and installed, and electric poles are being installed, which shows that they are starting to have hope that if we move from here our lives will improve"[Interview: Ward Councillor, July 2018].

The City recognizes the possibilities of such a people-land relationship:

"Some communities have lived in a specific area for so long that they don't even want to consider alternatives." (City of Tshwane, 2013b, p. 69).

Accordingly, not all the residents of Phomolong were optimistic about Spookpark as an alternative land for habitation. As noted by dwellers like Maneat*, some resisted Spookpark on the basis of what it cannot offer:

"Some resisted relocation...there were a lot — especially those who were being moved to Spookpark. Spookpark is ok, but it's far, I have seen the place. Now imagine being used to staying close to the main road. Spookpark is far, especially when you have school children"[Interview Maneat*].

Even some recipients of the newly permanent stands commented that they would have rejected relocation to 'Spookpark':

"I also would not agree to go to Spookpark or a place far from hospitals because I go for spinal cord treatment"[Interview: Makama*].

Other households, like that of Babymom*, were conflicted on Spookpark as an alternative:

"We would like to move, but Spookpark it is far I have not been, I don't want to go shem. There everything is far, no transport, no clinic, no school. It is also a dumpsite and the other side is a graveyard. It is not comfortable there"[Interview: Babymom*]

However, the land relations did not detract residents like SisZ* and BraSa* from embracing the relocation to Spookpark. BraSa* and SisZ* are both original Marabastad inhabitants [see section 6. 2]. Thus, they could be considered as having close ties to the land in Phomolong. Nonetheless, as SisZ* points out, they have now become somewhat of 'serial relocators' for the sake of development:

"I was the first person to agree to relocated from Marabastad to Phomolong. You can go search for the newspaper clipping where I was interviewed. I was also the first person to be relocated from Phomolong to Spookpark". [Interview: SisZ*, July 2018].

To them, this new settlement was an opportunity to more secure tenure. At the same time, they understood that, to access better tenure security, there had to be some trade-offs. As SisZ* comments, for development to happen requires some sacrifices. Their willingness for relocation does not discount

their concerns about the land in Spookpark. For instance, SisZ* clarifies the land in Spookpark was uninhabitable, but that did not deter them from embracing the relocation.

“They brought me here...my house is just down there. Here it was huge vegetation they were busy clearing. I put my things outside, I made fire outside, I slept outside... because they gave me hope that in three months, I will have a stand with everything. Others say there are snakes here and there are scorpions. When the other two [children] come back from school I must monitor them-where they play, what time, where they go”[Interview: SisZ*, July 2018].

In SisZ’s* view, those who reject relocations are anti-development. She might have been on point here – those rejecting alternative land were contributing to the delays in the formalization process. However, the land shortage is, in essence, the biggest challenger for formalization in Phomolong.

During my fieldwork in 2018, formalization in Phomolong had stalled. The re-blocking process and the relocations came to a standstill due to land unavailability. Consequently, the site layout plan could also not be completed and approved. Without the approved site layout plan those households with newly awarded permanent stands cannot receive their title deeds and access permanent bulk services – such as running water, electricity and proper sanitation.

Though residents in both the “permanent stands” and those in the squatter area are equally waiting, their material conditions are nonetheless different. Firstly, the standard of living is not the same in both parts of the settlement. For instance, the sections of the settlement that have received permanent stands show some visible improvements [see figure 6. 5: photo & Appendix 9] in the living environments. These sections also have clear separation between private spaces (homes) and public spaces like streets. Additionally, access to basic services like water and sanitation has somehow improved. The City has provided these areas with mobile toilet facilities, and a water tanker delivers water daily. On the contrary, those in the squatter area continue to languish in living environments plagued by poverty and vulnerability. Their living spaces remain overpopulated without access to sanitation facilities such toilets. Hence, they continue to rely on pits toilets, with others resorting to utilizing the mobile toilets allocated to the demarcated parts of the settlement.

Secondly, this status quo also implied that the settlement now had varying degrees of tenure. As I indicated earlier, we can draw some parallels between the unfolding formalization process in Phomolong and the continuum model approach to tenure securing. The ultimate aim of the incremental tenure securing approach is to confer legal tenure recognition, meaning title deeds, to households in the informal settlements being formalized. In Phomolong, the title deeds will be issued once the settlement has been proclaimed as a township. However, all legally verified households in the settlement were conferred local tenure recognition. This means that they were allocated numbers recognizing them as eligible for formalization. Thereafter, administrative recognition was also granted using the enumeration process. Figure 6. 4 illustrates that administrative tenure recognition confers higher levels of tenure security, although lower than that granted under legal recognition. However, those with permanent stands developed a heightened sense of tenure security. The permanent stands reinforced their developmental agency, as some started to build their houses. Many other recipients

of permanent stands like Pretty-Lady* and Madevu* were also planning to start building their homes in the near future. Contrarily, this developmental agency is a fantasy for those waiting in the squatter areas of the settlement waiting for permanent stands. Mamtn* is one of those in waiting, she highlights the impact of waiting as follows:

"You can't even do anything to show you work"[Interview Mamtn*, July 2018].

The emerging social differences prompted by waiting for permanent stands raise new insights. While the implications of insufficient land allocation as an operational challenge for formalization has been broadly observed, what also comes to the fore is the paradoxicality of formalization in production of equitable living conditions. For instance, formalization in Tshwane has placed informal dwellers in different socio-economic positions-others are in waiting and others permanent. I argue in Chapter 7 that this spatial [re]arrangement has socio-environmental implications. This social change illustrates that, at times, public policy fails in its nominal purposes and often operates to exacerbate our individual vulnerabilities (Fineman, 2010).

6.5 Permanency shifting politics and shifting spaces

The importance of permanent spaces in housing and environmental governance politics can never be understated. The previous section illustrated how permanent stands offer the hope of tenure security for many informal dwellers who have been waiting – some for more than two decades – to access tenure through the state-subsidized housing. Hence, as shown below, discussions on formalization posit permanent spaces are frequently as an intervention that would bring dignity and social upliftment to the informal dwellers. However, I argue that the concept of permanent stands shifts the responsibility of housing provision from the state to the people, in consequence restructuring the housing politics. To demonstrate this, in this final section of the chapter I introduce the concept of permanency, which I frame as a tandem constituted by the permanent space and the permanent dweller identity. Through permanency, I critically discuss how in an attempt to shift urban housing politics and rationalize by the UISP's inspired incremental tenure approach, formalization recuperates the idea of permanency as its spatial logic. Firstly, I look at how the idea of permanency found expression in the discourses of formalization, by normalizing the idea of permanent stands as the new formal.

Following that, I argue that permanency works to construct the permanent dweller- as a self-reliant version of the informal dweller- as a 'technology of power' to advance the practice of citizen activity in housing provision. I further argue that through the permanent identity, permanency shifts the housing politics from that of 'waiting' for the state to that of self-reliance, while the permanent dweller embodies the autonomous political actor, socially constructed to promote a new kind of active and responsible citizen-subject (Hoffman, 2014). Lastly, I account for the actions of the permanent dweller in the environmental condition of permanent spaces. Here, I argue that the autonomy of the permanent dweller is a political problem for environmental justice in permanent spaces. To make this argument I trace the unfolding of permanency in Phomolong informal settlement. In particular, I illustrate that, desperate aspirations for permanent stands, many potential recipients of permanency overlook the procedural flaws, consequently compromising habitability in permanent spaces.

6.5.1 Conceptualizing permanency as the new formal

In Tshwane, the notion of permanency emerged as logic to frame what formalization should mean to its recipients. As alluded by the NUSP for formalization to be successful, it has to be socially accepted. Ingram et al. (2007) introduce the idea of a social construct in public policy, which they argue is a rationale that explains how policy recipients relate to the envisaged policy goal. According to Ingram et al., (2007) policymakers socially construct targeted policy beneficiaries in positive and negative terms and distribute policy burdens and benefits to reflect and perpetuate these constructions. Similarly, the idea of permanency constructs the permanent dweller as a subject through which to entrench the idea of permanent spaces as a source of adequate living environments. Thus, in my view, permanency alludes to the entrenched socio-political platform, mobilizing to problematize housing deprivation.

At the inaugural launch of the City's formalization programme the then executive Mayor of Tshwane, Kgosientso Ramokgopa, posited the idea of the serviced stand as progressive:

"And all people need to do is to come with their shack and put them up on their stands. As time goes on, they can build their own houses when they have money. This way they won't have to wait forever for an RDP house" said Ramokgopa "[Rekord Newspaper, October 2013].

While this statement, one of several speeches delivered in relation to formalization, could be dismissed as another hollow political speech; signalled the shifting housing politics in Tshwane by reducing the struggles of housing access to citizens' inactivity in housing development. Framing the housing problem in this manner was normalizing permanent spaces as the new frame of reference to subaltern spaces. In this way the concept of permanent stands was gradually developed as part of the City's rhetoric on formalization. On one occasion, the former mayor of Tshwane uses the term 'permanent stands' to communicate the performance of formalization in the City:

"To date, 2 391 permanent residential stands were allocated to families from Mahube Valley Ext 15 and Mamelodi Ext 11." [Twitter: @Kgosientsho_R, 2015 September 22]

Similarly, other local actors in Tshwane, both political and technical, started to regularly use the concept of permanent stands to communicate the benefits of formalization. For instance, Mandla Nkomo an MMC¹⁶⁰ for Human Settlements during the tenure of the Democratic Alliance (DA) in the City of Tshwane, made these pronouncements on the benefits of permanent stands:

"We made a commitment that people cannot stay there for the rest of their lives. We decided to give the permanent stands so that they can have electricity and water" [Pretoria News, 2017 August]

To further normalize permanent stands the City employs legitimizing discourses. For example, the City constructed the dignity of informal dwellers as a social concern that can be addressed through permanency. Ramokgopa, in one of his official speeches, emphasized this link:

¹⁶⁰ MMC (Member of the Mayoral Committee) is a political appointment made by the Mayor. The role of the MMCs is to assist and advise the executive mayor.

“We will through this intervention restore the dignity of over 100 000 people, who are currently living in informal settlements without access to most basic infrastructure” (City of Tshwane, 2015)

These sentiments were later reemphasized in the City’s news bulletin:

“The City of Tshwane continues to make sure that its people’s dignity is restored. This was done through the “Re Aga Tshwane” programme where more than 2 800 permanent stands in Pienaarspoort were allocated to former residents of Mamelodi Ext 11 and Stoffel Park squatter camps. The Re Aga Tshwane programme aims to relocate families in informal settlements to permanent serviced stands”[Tshwane Current News, 2015 September].

Evoking dignity was a seemingly powerful political rhetoric that would gain traction in formalization. Though a political transition would take place in Tshwane [see chapter 4], the discourse linking permanency and dignity remained a common thread in all CoT formalization programs. When the DA administration took over the City’s leadership, it retained this rhetoric in its versions of the formalization programmes – Project Tirane and Letsema Project. At the launch of Project Tirane in 2017, DA mayor Solly Msimanga stated that:

“Through this intervention, we will restore the dignity of Tshwane people who live in informal settlements, without access to the most basic infrastructure,”[Pretoria Rekord, 2017 April].

Two years later, the incumbent DA mayor Stevens Mokgalapa launched Letsema Project by stating that:

“This provision of services means that the dignity of some of our most indigent communities is restored through homeownership. Having a place to call home is essential in undoing some of the injustices of the past”[Pretoria New, 2019 August]

This message was also communicated through the City’s website:

“As part of accelerated service delivery, the City of Tshwane took a decision to restore the dignity of Tshwane residents through the Letsema project, by providing them with basic services” [Tshwane website, 25 September 2019]

Using the notion to dignity to normalize permanent spaces in the City’s housing policy raises the politics of recognition (Taylor, 1994). For Taylor, the emphasizes on equal dignity ushers in equalization of rights and entitlements. In this context, permanent spaces are positioned as an equalization for decent living environments.

While the idea of the permanency attempts to portray housing politics in the City as inclusive, it simultaneously maintains the status quo on informality. Permanency, I argue, recycles informal spaces as permanent spaces. The City envisages permanent spaces to be sources of better tenure security, in the form of a title deed and basic services. However, the living environments in permanent spaces remain relatively informal. Figure 6. 6 captures the general living environment of permanent stands. Permanent spaces mostly consist of shack structures and rudimentary¹⁶¹ services. In the end, permanent spaces are just a glorified version of informal settlements (if one has to delve on the other

¹⁶¹ Rudimentary meaning in this context - means the minimum levels of services

definitions of informality). In dominant sustainable development discourses, informal settlements are usually seen as a hindrance to sustainable development. To be precise, informal spaces are commonly viewed as the culprit in environmental degradation (Ramutsindela, 2002). By comparison, the quality of the living environments in permanent spaces is not much different from that of informal settlements. However, these environmental issues are not prominent in the discourses on permanent spaces [this debate unfolds in Chapter Seven].

Most informal dwellers understand that the reality of permanent spaces is a far cry from the envisaged conception of their habitability. That informal dwellers nevertheless accept permanent spaces with their flaws is by no means a submission to power. Instead, it highlights the despondency of the people towards the state's slow response to housing delivery. Most of the informal dwellers interviewed in Phomolong and Jeffsville have been waiting for more than two decades to secure tenure through the state's subsidized low-cost housing. Consequently, for many, the idea of permanency resonates because it's a more reassuring way towards securing tenure than waiting for state-subsidized housing. This is mainly because occupants feel it is a waste of time to further challenge or engage with a failing state on housing provision. As some simply summed it 'ba palelwa mos', meaning they [the government] are not coping. In Phomolong, many commented that the state must just give them a stand and they will do the rest. By so doing, the people were now disengaging from the state-citizen relation and developing an alternative development path independent of state intervention. Through permanency, the people have started to see the state as not responsible for their development. Instead, they view the government merely as a means of unleashing their development potential. In their 2015 work on *'Waiting for the state: A politics of housing in South Africa'*, Oldfield and Greyling illustrate how 'waiting' has been normalized and legitimized as a state practice through the housing database – the waiting list. Contrarily, the approach of permanency through waiting, shifts the burden of housing tenure to the people. I argue that this shift calls into being the permanent dweller identity. I argue that, unlike conventional discourses on informality, permanency seek to construct the permanent dweller as a positive image of the informal dweller: self-reliant and independent of resource-seeking from the state. Drawing from Foucault's ideas on the governance of the self, Hoffman argues that we should investigate how modes of self-regulation become political problems. In this context, Hoffmann's argument offers value in advancing a more holistic view to the micro politics of permanency, given that it is premised on the idea that problematizes the emergence of new subject forms to the normalizing of new practices. The case of formalization in Phomolong has conformed to exactly that. Not only is the permanent dweller normalizing permanent stands as the new formal, but they also normalizing carrying the environmental burden - as shall be seen below and in Chapter 7.



Figure 6.5: Permanent Spaces in Phomolong

Source: Author (2018)

6.5.1.1 What does permanency mean to the people?

The people in informal settlements ascribe meanings to permanency, which are embedded in their complex social realities. Thus, to understand why local actors embrace permanency-despite its socio-spatial limitations-, one must first explore how its social meanings are constructed. As I already mentioned, to the informal dwellers, permanency has become a more reassuring means to tenure security. Especially for those who have been ‘waiting’ since the dawn of democracy to benefit from state housing. To most informal dwellers, the ‘waiting’ has evolved into a generational curse. Some of the older generation in the settlement use the age of their children as a benchmark to demonstrate their struggles with waiting:

“Look at my son over there he is now a man. He was born here” [Interview MaKama*, July 2018].

Mazet* also shares her experience:

“I arrived when that child was a few months old, and they were born in 2002. She is 17 years now” [Interview Mazet*, July 2018].

To reflect on the generational implications of non-permanency is Mamtn* added that:

"We have been living like this for a long time. Some of us give birth to a child; they start school and get married while you are still living here" [Interview Mamtn*, July 2018].

Many from the younger generation like KG* and Pol* were born or raised in 'waiting' and are now also waiting for tenure security. Thus, permanency resonates as it raises the hope of escaping the generational curse. As noted by many informal dwellers, having a permanent stand means they can start to build houses for their children. In this way, permanency is also seen as a means to creating a legacy. Furthermore, others viewed permanency as a means to end their current inhuman living conditions:

"It's now your house, your coffin when you are dead will come out of here, it will not leave from the squatter camp. Before, when it was it was a squatter camp, if you die, they would go and bury you at your parents' home. Now it is a permanent you know that if I made a bedroom my coffin will be placed here and it will leave from here. So, I must make some improvements to the property, because we must also 're tshabe matlho a batho'¹⁶²" [Interview: Makama*, July 2018].

"When given permanents each household will have privacy" Interview: Mamtn*, July 2018].

Others like Maneat* and Redshirt-Redcap* reflected on the place of permanency on stability:

"Yes, with permanent I also can see a bit of light. Cause we are ageing and children are also growing. So in a permanent, it means I don't move again" [Interview: Maneat*, July 2018].

"A permanent is important because we can no longer disturb each other with 'hey suthela kwa, hey hare dulisane'¹⁶³ that is not the case here" [Interview: Redshirt-Redcap*, July 2018]

In this context permanency gives hope for habitability within informality, a sentiment shared by Nan* a recipient of a permanent space:

"Yes, we were happy, cause here it is a permanent it is not the same. At least you know that one day they will give you electricity, water as well" [Interview Nan*, July 2018].

"Well, excluding the pipe thing it is a good site. Not necessarily because it is bigger, well... what can I say ...well properly the position. You know mos with the informal settlement they placed us too close to each other. But now it's a bit open. We could not fit our car in our yard at that time. We had to ask neighbours to park our car" [Interview Pretty, July 2018*].

Aspirant permanent dwellers like Babymom* framed this habitability as safe living environments:

¹⁶² 'Re tshabe matlho a batho means we have to keep in mind what others think of us

¹⁶³ 'Hey suthela kwa, hey hare dulisane' means make way, let us share the space

"We are expecting a toilet, water and a house...and electricity cause paraffin and candles burn houses, as you can see this thing is a shack there is only one window. Bedrooms are that side, and it is dark there, when a child comes back from school, they will use a candle to see"[Interview Babymom, July 2018*].

Whereas to other recipients like Maneat* habitability through permanency has positive health implications:

"Before it was permanent dirty water was running just in front of my house. That's what made me sick. Ever since we moved here, I feel a bit better"[Interview Maneat, July 2018*]

To the dwellers permanency is a surface reflection of a more complex social life. I argue that there is intangible value in permanency, which is unlocked by a permanent stand. de Soto (2005) uses the example of an apple to illustrate that property value can equally rest in the physical state of the apple as a fruit we can see and feel, and also in its intangible form. De Soto argues that intangible value has implications for social relations. I contend that the intangible aspect of permanency is encapsulated as a way of life of the permanent dweller.

6.5.2 The permanent identity and the burden of permanency

The previous section illustrated how permanency positioned housing tenure deprivation as a problem of an inactive society in housing provision. In the process permanency constructed the permanent dweller as an autonomous actor who can carry the responsibility of housing development. I will now turn to illustrate how, by stepping into the housing provision space traditionally dominated by the state, the dweller in the self-interest of being permanent also involuntarily carries the environmental burden of permanent spaces. Hoffman brings our attention to the fact that choices made by actors are not a natural phenomenon but a fostered and cultivated one. In this instance, the long wait for state-provided housing has promoted permanency as a cultivator of self-reliance. Permanency postulates the idea of an autonomous permanent dweller in positive terms. However, from the case of formalization of Phomolong, there emerge alternative readings. The case of Phomolong illustrates the permanent dweller's autonomy as instrumental in perpetuating poor living environments in informal spaces.

The idea of formalization seeks the redistribution of resources – a permanent stand and basic services. Thus, actors implementing the formalization process make various technical decisions such as choosing the land for temporary relocations, the size and position of the permanent stands, the methods for service delivery. As I illustrated in section 6.3, in the City of Tshwane, these activities unfold under an action context riddled with inconsistencies and procedural flaws. I also argued that this action arena derives from the overreliance on informal rules. The city officials implementing formalization are at times facing various pressures to deliver permanent spaces. Without clear rules, the process becomes marred by procedural flaws. As argued by Dixon & Ramutsindela (2006) in areas of human settlements we need to place equal importance to processes and strategies for achieving environmental justice as we do to the envisaged outcomes. While it is necessary to account for the implications of the action arena formalization, I, however, also shift focus to challenge the consequences of the permanent dweller's autonomy on the process and outcome of formalization.

In Tshwane, the informal dwellers' desire for permanency – resulting in permanent stands – is being sought and accepted, at times, even under undesirable conditions. For instance, in Phomolong, the aspiring permanent dwellers choose to overlook the effects of these procedural flaws on their living environments. Fearing to jeopardize their opportunity for permanency, some chose to absorb this burden of permanency.

As already discussed, the successful implementation of the re-blocking process in Phomolong necessitated shifting people in and around the settlement. Consequently, some of the informal dwellers were relocated to neighboring areas like Nellmapius and Spookpark. Those eligible for permanent stands in Phomolong were moved around the settlements in line with the proposed settlement layout plan. This process was understood and anticipated by the prospective permanent dwellers as a necessary step towards their permanency. However, some procedural inconsistencies challenged the process. This led to different permanency experiences. For some permanents the relocation process was consultative. As highlighted by Maneat*:

"It was only the surveyor who was present to allocate a site to you. But when you are not satisfied with the stand, you have the right to raise your concern"[Interview Maneat*, July 2018].

Similarly, maKama* claimed that those charged with the process of internal relocations were empathetic:

"The people who were allocating the stands had empathy if you tell them that this does not suit, they would understand they did not pressurize people, they would say 'we are not able to pressurize people, we must give people their wishes'"[Interview: maKama*, July 2018]

However, this level of democratic participation was not equally experienced by other permanent dwellers. Some in Phomolong felt they were coerced to accept the permanent spaces under unfavorable conditions. Fearing the risk of losing out on permanency they, accepted permanent stands even though they were exposed to potential vulnerabilities. In 2018, on my first day of fieldwork in Phomolong, some newly demarcated stands were flooded by water from a burst pipe [see narrative in box 6.3]. The affected stands were demarcated closely to a massive Rand Water¹⁶⁴ pipe [see figure 6.7]. A young man in his twenties, also affected by this incident, intercepts my walk-about interview with community activist. In dialogue with him and his neighbours, also affected by the recent pipe flooding, they voice how their concerns about the water pipe were silenced:

"We raised our concerns about proximity to the pipe with the City officials who were demarcating the stands, particularly since we were here when that fatal pipe incident happened [referring to the 2015 burst pipe that claimed some lives and injured many others]"[Interview: Young-Man*, July 2018].

The young man clarified why there was no resistance from the people:

"At the end of the day, one's is at their mercy. So, you suck it up and take the stand, or risk being omitted" [Interview: Young-man*, July 2018]

Although others were not coerced into accepting the permanent stands, they, however, could not escape the environmental burdens. To absorb the environmental challenges required financial and technical self-reliance:

"I want to lift this place...(you will put some cement there!)...even if I don't put cement but at least if it can go up and the water flows outside, even now I am worried I am not sure what I will do, maybe get some bricks and build the place up, put soil around the whole place. That will mean dismantling the place and starting it all over again"[Interview Madevu*, July 2018].

This 'responsible exercise of individual autonomy' (Hoffmann, p:1585) taken up by Madevu* was also practiced by others like MaNeat* and her neighbours, who find themselves and their families at risk due to old pit toilets. In Phomolong, like in many other settlements in the City, the soil is full of pit toilets. One of the procedural flaws is that the City did not rehabilitate these pit lavatories prior to re-

¹⁶⁴ Rand Water is a South African utility that supplies potable water to the Gauteng province and other areas of the country and is the largest water utility in Africa.

blocking. Those with insights commented that in some instances, unaware, new stand owners rebuild their shacks on top of the old pit toilets:

“I am told that in one of the houses up there maggots were coming underneath the house. Those people were moved around January, then it started raining, and I hear maggots came out. They placed that person right on top of the toilet. But that was not our agreement with the municipality. We were told that they are going to put some chemical in the toilets. But no, they are not doing things the way they promised. I am lucky cause at least I have some idea about this area. Now when they place you in areas unfamiliar, like some guy there”[Interview: Maneat*, July 2018].

Despite these environmental burdens permanent spaces continue to be accepted by residents. For many informal dwellers being permanent supersedes these environmental burdens. I argue, therefore, that securing tenure security through permanency diffuses the environmental consciousness of the informal dwellers.



Figure 6.6: Flooded Permanent Stands in Phomolong

Source: Author (2018)

One of the images in Figure 6. 7 shows contractors working on a water pipeline in Phomolong, in July 2018. While construction was still ongoing, the pipe burst in one point. This incident happened at the beginning of my fieldwork in Phomolong. I was in the middle of a walkabout interview with the ward councilor when she received a call informing her of a pipe burst that occurred the previous night. Together, we quickly rushed to part the settlement where the incident took place. According to those affected, this is the same pipe that caused the fatal flooding in 2012. The only difference is that it had burst at a different point. Some of those affected recounted their experiences of this environmental injustice under permanency. They stated that pipe burst occurred in the middle of the night. The two siblings, Bassie* and Sister*, and their neighbor Lebo* explained that they heard vibrations and suddenly there was water everywhere.

A community-activist*, who is also a Community Liaison Officer for the project, explains that the permanent stands were supposed to be placed 50m away from the pipe. But this was not the case, instead, shacks were placed less than 10m from the pipe. He also regards the City negligent: "People must therefore hold council accountable" comments the Activist*.

An interesting observation is that a City official involved with planning in Phomolong is nonchalant about this situation. In my conversation with him, concerning this matter, he brushes it off as insignificant:

"I would not agree. These are the normal pipes that you will have in the township. These are not big pipes; they connect from these pipes. The pipes that give us water they are like this, even in your house in front of the house, next to the road"

Box 6.3: Pipe Burst in Phomolong

6.6 Conclusion

In this chapter, I illustrated how through the unfolding of formalization we can understand the housing and environmental politics in relation to subaltern spaces. This discussion was framed around the multifaceted process of formalization - first as a policy objective, then as a practice process and as product. The debate on the policy aspect of formalization focused on the UISP and its incremental approach to tenure securing, and how it rationalized the site and service approach to tenure securing. In keeping with this perspective of the UISP, I introduced debates on the institutional arrangement to highlight the implementation limitations of the formalization processes. I especially focused on formal and informal rules and how they structure the practice field of formalization. I also debated the land politics in the City and their implication on formalization as a process. I accounted for these land deficiencies, by highlighting the social changes that emerged between those eligible for permanent stands and many who remain in limbo between the status of informality and permanency.

To speak of formalization as product, I illustrated how the idea of permanency as the logic of formalization sought to normalize permanent stands, by problematizing housing tenure deprivation as an issue of an inactive society in housing delivery. Borrowing from Hoffman's (2014) view examining how political agency is cultivated, I highlighted how modes of self-regulation may become a political problem. I also problematized the autonomy of the permanent dweller in the context of environmental production. I argued that, driven by their desperate aspirations for permanency, many informal dwellers, involuntarily carry the environmental burden of permanent spaces. Despite these shortcomings, permanent stands continue to be desired. The idea of the permanent dweller as a model subject seems to be firmly entrenched in society. However, as the next chapter will show, this celebrated permanency status is undermined by the politics of misrecognition during the production of permanent spaces. In consequence, this perpetuates the marginalization of informal spaces from the City's sustainability agenda.

CHAPTER 7

Formalization a Producer of Insecurity

7.1 Introduction

In the previous chapter, I outlined permanency as a situated spatial rationale of formalization- in its different spheres. I also showed how permanency worked with the ideas of the permanent dweller and permanent spaces as its 'technologies of power' (Foucault, 1977). I argued that the permanent dweller is an embodiment of a restructured relationship between the state and informal dweller, this is evident from how the informal dweller's struggles for land tenure distribution are now embodied in the idea of permanency. Furthermore, for those striving for permanency, the unspoken consensus underlying the production of permanent spaces comes with sacrificing of environmental security.

Chapter Seven builds on the environmental injustice in relation to formalization. Here, I turn to exploring how, through the misrecognition of the permanent dweller identity, formalization sets off environmental insecurities producing vulnerabilities and, at times, even producing modes of impermanency. The argument is developed in four stages. The first section lays out the context for the theoretical argument of the chapter. Here, I focus attention on what kind of justice is needed for formalization to contribute to a just society. To make this argument, I draw from Fraser's trivalent model of justice, which argues that to overcome unjust social conditions, the institutionalized obstacles that are preventing participatory parity would need to be dismantled (Fraser 2008). This section highlights ways in which the misframing of the informal dweller is amplified by socially constructed spatial production norms, through the misrecognition of the informal dweller as intentionally seeking tenure in vulnerable spaces. In the end, this misrecognition sets the grounds for undermining the informal dweller as a vulnerable subject and dismissing their claims for environmental justice. To do this, I locate my analysis in the formalization process unfolding in the City of Tshwane. In particular, I will look at two informal spaces, Phomolong and Jeffsville, each at a different interface with formalization. Phomolong is currently formalizing while and Jeffsville is in waiting.

In keeping with this analysis, the second section makes an argument that, while formalization initiates physical the transformation of informal settlements through the production of permanent spaces, the misrecognition of the informal dweller identity remains static – it does not simultaneously segue to correspond with the newly attained permanent dweller status. To examine these contradictions, I locate this argument in Lefebvre's spatial triad of production of space. Here, I argue that spatial practices and lived experiences observed in formalizing spaces contradict the conceived spatial imaginaries of permanent spaces as just spaces. I further argue that those spatial practices breed conditions that feeds the misrecognition of the permanent dweller identity. At the end, the more things change the more they remain the same.

The final section of the chapter draws from Bourdieu's conceptual nexus of habitus-field-capital, to lay out how misconceptions from spatial practices in formalizing spaces plays out in the struggles for redistribution of cultural capital. Here, I argue that these practices work in ways that close off formalizing spaces (permanent spaces) in the City from attaining new ways of doing waste. In my closing remarks, I argue that, in the end, formalization misses the opportunity to facilitate the inclusion of permanent spaces in the City's sustainability imaginary.

7.2 Formalization, deprivations and scales of Injustice in subaltern spaces

Debates about deprivation and misrecognition often intersect. Misrecognition can unfold by excluding certain individuals and groups from the possibility of participation parity with others (Fraser, 1996). Deprivation, on the other hand, I argue, hinders equal distribution of resources leading to vulnerability. Thus, in this view, misrecognition and deprivation are both discriminatory in that they perpetuate injustice. In most South African cities, including Tshwane, the illegal status of informal settlements is used by the city to justify their exclusion from accessing services such as housing, water and sanitation. In consequence, the city's informal settlements present as spaces of vulnerability, characterized by poor living environments.

- Formalization intervention-Devaluing of the informal dweller

As I will show below, the devaluing of the informal dweller identity starts from these spatial practices. Formalization was to mark the turning point in the habitability of vulnerable spaces and tenure deprivation for the informal dwellers. However, the process of accessing the benefits of formalization - meaning permanency - remains slow and skewed, leaving many in waiting. As a result, the misrecognition of identities also persists. Not only that, but as I will also show, formalization idealizes the idea of the permanent dweller identity. Fineman (2017) argues that idealised subjects set norms that generalize identities, with those not conforming to those generalizations framed as deviant. For instance, those waiting for permanency are devalued as deviant [see below], generally embodied in their framing as *baipehi* [the land invaders]. While formalization pursues the idea of the permanent dweller as representation for justice, it nonetheless fails to dismantle these misrecognitions deeply entrenched in the informal dweller, which spills into the permanent dweller.

The identity of the permanent dweller remains devalued, similar to that of the informal dweller, as that of a defiant and irresponsible actor. This misrecognition is rooted in the reoccurring spatial practices such as open solid waste dumping, which reactivate the devaluing of the permanent dweller identity as an irresponsible waste actant. These misframings of the permanent dweller consequently hinder the participation parity of informal spaces in the production of sustainable living environments. Thus, for formalization to integrate permanent spaces into the City's sustainability urban development will require the dismantling of these misrecognitions. This will demand, for instance, that formalization shifts from maldistribution of waste management resources to permanent spaces, which I argue hinders the imparting of waste cultural capital, meaning the 'ways of doing waste' (de Certeau, 1984). This waste cultural capital is necessary to ensure permanent spaces' participation parity in their development as sustainable living environments.

Formalization perpetuates the misrecognition of identities, not only on those in waiting, but equally so to its beneficiaries, the permanent dwellers. This argument is two-fold: it starts by illustrating that those in waiting not only carry the burden of impermanency through coping with living with vulnerabilities, but they also carry the burden through the continuous misrecognition of their identities. Taylor contends that in instances of misrecognition of identity by others, as inferior to theirs, may result in social damage and distortion. In relation to formalization, I argue that, to the detriment

to the permanent dweller, the misrecognition as a 'devalued identity' (Fraser, 1996) manifests in patterns that show a lack of parity in the production of sustainable spaces.

- Fraser's justice

In view of the above, I ask how then should formalization pursue recognition in order to build a just society? To react to this question, I draw from Fraser's trivalent conception of justice [see table 2.2]. Fraser (2009) interprets parity of participation as a central element to justice and proposes that, for participation parity to occur, we need to equally address the politics of recognition, the politics of redistribution and the politics of representation. Fraser calls this setting of boundaries that determines who should be included and excluded as misframing. According to this view, the starting point should be to redress misframing, defined as the exclusion from consideration for first-order claims against maldistribution and misrecognition (Fraser, 2008). As Bozalek & Boughey (2012) explains: "The struggles against misrecognition and maldistribution cannot succeed, unless they are joined in a struggle against misframing" (p:697). Thus, for Fraser, to remedy injustice, can only be achieved by a practical orientation that encompasses both a politics of redistribution and a politics of recognition. As argued by Fraser, to facilitate participation parity requires equal redress and the realization of the politics of redistribution, the politics of recognition and the politics of representation. Following on this, I argue will require that formalization shifts from its current material-redistribution (providing permanent spaces) focused approach to injustice, towards one that also interprets misrecognition of identities as injustice.

- Justice of formalization

I argue that from Fraser's trivalent conception of justice we can draw parallels that can help us analyze justice in the context of formalization. As mentioned in Chapter Six, formalization interprets injustice as merely the deprivation of land and basic services. In consequence, it promotes the idea of equal redistribution of material resources, in the form of permanent stands, to those previously deprived. In this way, I argue, formalization reduces economic factors as a singular cause of injustice. Framing justice in economic terms, I argue, hinders the participation parity of 'subaltern spaces' (Roy, 2011) in the urban sustainable agenda in various ways. The first limitations of this 'more economic interpretation to injustice' (Fraser, 1996), without discounting its importance, is that it fails to address the misrecognition of the informal dweller identity. Borrowing from Fraser, I argue that, this approach to justice creates a vacuum where the status order is decoupled from the economic structure of society, as I will demonstrate in the following sections. In the end, for formalization to deliver justice, it will have to start by depoliticizing the conditions that perpetuate the misrecognition of the permanent dweller. I argue, therefore, that rethinking justice in the context of formalization and the permanent dweller identity is crucial for fostering the conditions of a just society. Rethinking justice could also mean reconsidering the state's role in the provision of justice, as argued by Fineman (2016) the state needs to respond to vulnerability in ways that ensure participation parity for all members of society.

The permanent	Those in waiting	The squatters or informal dwellers
Misframing of identity based on spatial practices influenced by governance challenges	Misframing of identity based on spatial practices as they wait for permanency	Informal settlements are generally classified considered as illegal, until they are identified as beneficiaries of formalization. Generally. This category includes those who do not qualify as beneficiaries of formalization. This list may include foreign nationals, people earning income disqualifying them as beneficiaries of low-cost housing, those who already benefited from the RDP housing scheme.

Table 7.1: Idealised Permanent Identities

7.3 Depoliticized Geographies of Vulnerability: [Mis]framing and Misrecognition of the Vulnerable Identity

Discourses on informality, I argue, depoliticize the vulnerability of the informal spaces by undermining the structural deprivations of land redistribution, contributing to the manifestation of informality. Struggles for deprivation, in the context of spaces of vulnerability, breeds the struggles for misrecognition of identities. Bohle (2007) frames geographies of vulnerability as arenas in which human freedoms and human rights are negotiated, struggled, won and lost. Thus, for informal spaces as geographies of vulnerability, their struggles for human freedoms and human rights are embodied in tenure deprivations and the misrecognition of identities.

- Place making

The placemaking process followed in the development of informal spaces falls outside the planning norms set by cities (Ono & Kidokoro, 2020). This nonconformity by the informal dweller to the normative guidelines in the production of space flows from their deprivation of land resources. Many informal dwellers secure tenure through the invasion of land. However, in dominant conventional discourses, these informal acts of spatial production are used as a measure to interrogate the values of the informal dwellers. Hence, those in power misframe the social identity of the informal dweller as a deviant ideal-type¹⁶⁵ whose actions and values in seeking tenure defy defined social norms. (Brennan et al., 2013) situates social norms as central to the production of social order or social coordination. In their view, norms serve as platform from which we can praise and blame people for their behaviours and attitudes. Applied from a marginalizing context, norms can become tools to devalue those who do not share the similar values as us as being deviant. In this context, I argue that social norms play a role in social ordering by foregrounding the misframing of identities.

Based on their misframed deviant identity, informal dwellers' claims to equal access of basic services such as housing, water and waste management-are more than often discounted. In Chapter Two, I followed on subaltern urbanism to pursue an argument that seeks habitability in spaces of vulnerability. I maintain here that, particularly given the land politics in South Africa, seeking informal tenure is a not a sign of defiance; rather it is a response to tenure deprivation and exclusion from equal participation in production of habitable environments. Thus, the misframing of the informal dweller as a defiant and irresponsible subject is unjust in itself as it depoliticizes the land tenure deprivation history in South Africa. Misframing others based on their nonconformity to a set of exclusionary norms, to borrow from Fraser, makes misrecognition morally wrong. For Fraser (1996) justice requires full participation in social life, and this also implies recognition of group distinctiveness.

It is therefore my intention in this section to set the tone for how the representation of the permanent dweller remains subaltern. I pay particular attention to the lived experiences of informal dwellers,

¹⁶⁵ *The ideal-types are social constructs that seek to stereotype. They work from the principle that meaning is a guiding force in social life. The relevance of a specific ideal-type derives from the value-ideas believed to exist in a certain culture (Weber 1904:192 cited in Fraser).*

starting with how they generally frame their idea of livability from a position of vulnerability. I then outline how the misframing of the informal dweller as an irresponsible actor deliberately seeking tenure in spaces of vulnerability, undermines their recognition as vulnerable subjects. The overall idea is to illustrate how the ensuing misrecognition results in the dismissal of their claims for 'just' living environments.

7.3.1 Misframing the vulnerable subject as a defiant identity, a barrier to claims to environmental justice

The distinctiveness of informal spaces is not only in their spatial arrangement as geographies of vulnerability¹⁶⁶ but also as spaces constituted by vulnerable subjects. The narrative of informal spaces as geographies constituted by vulnerability is generally acceptable in literature and empirical rhetoric. That being said, the idea of the social identity of the informal dweller as the vulnerable subject is downplayed. This is partly because mainstream narratives frame the emergence of informal settlements as a political expression manifesting from acts of defiance, illegality and unlawfulness (Chiodelli, 2019; Sanghera, 2020). In this misframing the informal dweller is positioned as an autonomous political actor who relies on their political agency to intentionally appropriate and invade spaces of vulnerability. However, as I have attempted to demonstrate in the preceding chapters, in Tshwane, for many of those seeking informal tenure, inhabiting spaces of vulnerability is not by choice. Rather, they establish informal settlements to fill the tenure vacuum created by the ineffective land transformation system (Nassar & Elsayed, 2018). Because land invasion, to establish informal tenure, is driven from a position of desperation and anxieties of living without tenure, it is in most instances accompanied by poor land choices. This results in many, ‘unintentionally’ living in conditions of vulnerability, exposed to the daily realities of the risky environment. Informal spaces like Phomolong and Jeffsville were also started on those bases. As I indicated in Chapter six Phomolong was established by the City of Tshwane in 2002, when about 240 households were relocated from Marabastad to a piece of land owned by the City in Mamelodi east. Some parts of the land around Phomolong were not suitable nor demarcated for human habitation as they were reserved as servitudes and environmental zones [see figure 7.1 and also Appendix 9 Section B3]



Figure 7.1: Municipal Servitude Land in Phomolong
Source: Author (July, 2018)

¹⁶⁶ Bohle (2018) in *geographies of vulnerability* frames as “arenas in which human freedoms and human rights are negotiated, struggled, won and lost.

The unsuitable nature of the land not deter those seeking tenure. Soon after Phomolong was established many started invading the settlement and occupying those uninhabitable patches of land. As maCheckers* & maFifa* commented:

“When we saw the municipality starting to bring people in Phomolong, we were like no what about us the children of Mamelodi. So, we also erected our own shacks”

Others like maMtn* started arriving in Phomolong from places outside Mamelodi, even outside the province. Consequently, as the settlement expanded *baipeyi* – the land invaders – started to encroach on these unsuitable parts of the land. For instance, many homes were erected on top of the Rand Water pipe. Because of these development decisions, informal dwellers found themselves in risky environments exposed to constant vulnerabilities. As noted by former residents of Phomolong, Machekers* and Mafifa, the pipe would sometimes leak inside people’s shacks. Although this was not a good living environment, they stayed on, hoping things would be fine. The most notable exposure to this vulnerability was when the pipe finally burst in month 2012, killing 2 children and leaving others injured and displaced [see figure 7.3- press cuttings]. About 800 households affected by the pipe burst were relocated to Marikana [see Appendix 9]. The patch of land that houses the pipe remains unoccupied [see figure 7.2]. Despite many being desperate to secure tenure it seems no one is willing to take the risk of reoccupying this space of vulnerability. While the people of Phomolong lived on top of this water, with all its problems such as leaking into their homes, this level of vulnerability was acceptable. However, following the death of children and some adults injured in the 2012 pipe burst, the vulnerability creates by the pipe became too dangerous and unacceptable to the people.



Figure 7.2: Unoccupied Pipe Burst Area, in Phomolong
Source: Author (July, 2018)

Burst water pipe kills toddler, baby

BY MCKEED KOTLOLO - 21 August 2012 - 09:50



"NEVER underestimate the might of water," were the words of a distraught father describing how water gushing from a burst underground pipe killed his three-year-old daughter and destroyed his shack in Mamelodi, Pretoria.

"NEVER underestimate the might of water," were the words of a distraught father describing how water gushing from a burst underground pipe killed his three-year-old daughter and destroyed his shack in Mamelodi, Pretoria, yesterday.

Another child, a four-month-old baby, died later at Mamelodi Hospital.

Tshwane emergency services spokesman Johan Pieterse said two children died and a further seven people were injured.

Residents of Phomolong informal settlement in Mamelodi East said the incident started like an earthquake.

Mike Mashiane, 29, and his wife Vinolia Sikele, 30, had erected their shack over the pipe five years ago. They had been staying there with their two children, Tintswalo, 3, and Retsibile, 10.

Mashiane had just gone to bed at about midnight when the incident occurred.

"I was in bed for about 15 minutes when I heard a loud sound that lasted about five seconds, and my house was gone. The whole place was dark and I heard my son screaming for help, and I just stretched my arm and luckily grabbed his hand. I managed to pull him to safety.

"I did not know what happened to my daughter because I could not find her."

Mashiane sustained facial and body bruises.

Among the injured was Thabiso Shabangu, 12, a Grade 6 pupil who sustained a cut to the forehead and a gash to the right arm.

He told Sowetan how he was lifted into the air by swirling water and landed metres from his shack.

"I thought it was the end of the world," he said.

Figure 7.3: Pipe Burst in Phomolong

Source: The Sowetan (2012)

This was not the case in Jeffsville, where a space of vulnerability was re-occupied by a new set of dwellers following a sinkhole incident that led to the relocation of its previous habitants. Jeffsville, like in Phomolong, was developed from a point of tenure desperation. As Kat*, a young dweller in Jeffsville commented:

"My dad was a young man [who] needed space for his family, hence they decided to invade Jeffsville". [Interview Kat, August 2018]*

The settlement was formed in 1990, with most of its original inhabitants being backyard dwellers from the neighbouring Atteridgeville township (Monson, 2015). The land on which Jeffsville is built is allegedly dolomitic¹⁶⁷. Hence, the settlement has experienced some recurring exposure to sinkhole risk. The 2015 sinkhole was much impactful. Forty-Five homes were directly affected, however, unlike in Phomolong, there were no injuries or fatalities.

Those directly affected by the sinkhole were evacuated to temporary shelter and within days were moved to a piece of council-owned land in Bremmer (chapter 6). However, others in the surrounding properties refused to be evacuated citing economic loss as they had already started building their formal structures. A couple of weeks later another smaller sinkhole occurred about six hundred meters from the aforementioned one. Although the sinkhole inflicted fear, a few months later both areas were reoccupied. Because the overall agenda of the people of Phomolong and Jeffsville is to secure tenure, their pursuit at times requires pushing the limits of one's vulnerability, including continuing to live and cope with these recurring risks. For many others, still excluded from accessing land resource, securing tenure by re-appropriating risky spaces is not an impossibility, as was the case in Jeffsville. Those who re-appropriate the hazardous spaces are mindful of the potential risks. They, however, cite their struggles for land tenure and the exclusion from permanency as a driver of their decision to inhabit spaces of vulnerability:

"It is not a safe place, it's just that we do not have a choice....." she adds "We don't care as long as we have places to stay where we can sleep" [Interview: Mom, August 2018].*

The state's response to such vulnerabilities also limits participation in the production of liveable environments. The re-occupiers of the sinkhole also argued that risky space was a way of counteracting the social ills that the City was once again failing to address. For its occupiers, the unoccupied sinkhole area was manifesting into a potential crime environment: Oldie*, one of the longest residing Jeffsville community members, made this comment:

"You see here it used to be dumping, we would find babies and we call the police. We are not safe with our lives, that is why we decided, let's stay here" [Interview: Oldie, August 2018].*

Although the sinkhole area posed life threatening risks and vulnerabilities, those were superseded by the desperation for land tenure. Thus, seeking tenure in this space of vulnerability was a political statement. Other dwellers, like Slayer*, even argued that the City should actually thank and compensate the re-occupiers of the sinkhole.

The people have confidence that they can contain the risk associated with the living conditions in spaces of vulnerability. But such measures are not sustainable. Bohle (2007) argues that coping and adapting to vulnerability is a process of uncertainty riddled by trial and error. This uncertainty has also been experienced by the sinkhole re-occupiers, as their coping mechanisms against vulnerability are starting to get tested. A few months following the Jeffsville residents' re-occupation of the sinkhole,

¹⁶⁷ Dolomitic land is prone to sinkholes (Buttrick & van schalwyk)

the occupiers were exposed to an imminent danger as their makeshift rehabilitation of the sinkhole was starting to erode. According to Sae*, an informant from the settlement, some of the re-occupiers have since moved in with their neighbours due to fears of plummeting into the sinkhole. This illustrates that there are limits to the levels of vulnerability than can be tolerated. Nonetheless, when such hazardous incidences occur, the manifesting vulnerabilities are most often dismissed, by the outsiders and the state, as self-induced. The popular narrative is that the affected are 'to blame for putting themselves in vulnerability prone environments. The values of those pursuing tenure in spaces of vulnerability are questioned and stereotyped as intentional acts of breaching social norms. This, in turn, is used as grounds for dismissing the idea of the vulnerable subject.

The identity of the informal dweller as a vulnerable subject does not take away from their agency as political actors. Reflecting on the agency of the vulnerable subject, Bohle (2007) makes an argument that the *"vulnerable subject is not a victim but actually has lots of agency in the arenas of vulnerability. Rather, the vulnerable subject is an active actor in devising adaptation strategies. They constantly to cope with risk in their living environments, as they deliberately adapt to the shifting regimes of vulnerability"*[p: 14].

Contextualizing the agency of the vulnerable subject based on their ability to adapt to vulnerable living conditions creates fertile grounds for the contradicting politics that undermine the idea of the informal dweller as a vulnerable subject. Many informal dwellers in waiting for permanency rely on this agency to cope with the living conditions in spaces of vulnerability. In a warped way, the state expects this agency to buy cooperation and patience, from those in waiting, as it rolls out its processes towards permanency. However, in some instances, this agency is politicised to justify the state's poor or lack of response to vulnerability. Particularly in cases where this agency, diluted by the structural injustices under which the informal settlement dwellers operate, leaves them with few choices, many of them flawed.

What remains unshaken are arguments that seem to invoke meanings that reposition the vulnerable subject as a liberal¹⁶⁸political actor, which is rejected by Fineman (2010). For Fineman, the state manipulates the concept of the vulnerable subject to justify its lack of intervention in the vulnerabilities facing the subject. She expresses concern that, in a mistaken effort to promote autonomy, the state and other institutions may do too little to protect vulnerable in society:

"Increasingly, the government is unresponsive to those who are disadvantaged, blaming individuals for their situation and ignoring the inequities woven into the systems in which we all are mired"(Fineman, 2010: 12).

Drawing parallels from Fineman, the City's poor response to the vulnerabilities of the informal dweller reflects its nonchalance to the structural inequalities that induce spaces of vulnerability. This is reflected in the City's turning a blind eye to the people's exposures to recurring and intersecting vulnerabilities. In Phomolong, for instance, the City claims to have made some efforts to communicate

¹⁶⁸*"The liberal subject, constructed in terms of individual autonomy, self-sufficiency, and personal responsibility, does not distinguish among vulnerabilities, suggesting that individuals bear primary responsibility for their situation and circumstances, regardless of their nature or cause.(Fineman)*

the dangers of building shacks on top of the pipe. A city official commented that the dwellers were forewarned about settling there, in the end, shifting the blame for the vulnerability to the people. The city official neglected to point out, however, that it had to take a disastrous incidence, in both Phomolong and Jeffsville, to activate the City's response to the needs of the vulnerable subjects. In both instances the City responded with the emergency unlocking of land to accommodate those affected by the disaster. Tshwane argues that it is easier to release land in such instances than it is only required to relocate small numbers of people [see Jason Ngobeni interview: Tshwane Update, 01 2013]. These two cases, nonetheless, illustrate the City's reactive and nonchalant response to vulnerability. Prior to reoccupying the 2015 sinkhole, the people of Jeffsville arranged a formal meeting with the City to inform them of their intentions to occupy. A city official recounts those interactions:

"Yes, they were here. What was supposed to happen was that we were supposed to put up a fence. Unfortunately, I still have a quotation that I got, and the city indicated to me that they do not have the money. But we told them about the dangers of leaving that place empty and it seems that they are not taking it seriously and that's why it will end up being occupied. But the Councilor together with communities we tell them reoccupation of the area is on your own risk. If the popo hits the fan then you are going to be held responsible, because you can't go and stay in an area where you know some people have died. It is like signing your death certificate". [Interview: city official 1*, August 2018]

In further efforts to dismiss the idea of the vulnerability subject, the city misframes the informal dweller as an irresponsible subject. This framing is also fueled by rumours that some informal dwellers, in an attempt to circumvent the process towards permanency, deliberately settle in risky environments. However, those rumours are brushed off and disputed by some of the informal dwellers. Although Adger (2006) hints that "vulnerability is driven by inadvertent or deliberate human action that reinforces self-interest" (270) the re-occupation patterns in Phomolong and Jeffsville dispel the narrative that the desires for permanency perpetuate self-exposure to vulnerability. For instance, unlike in Jeffsville the evacuated area in Phomolong has not been re-invaded. Perhaps the loss of life was a deterrent for such action. Hinting, thus, that death is the tolerable limit to coping with vulnerability.

That those waiting for permanency are able to endure the living conditions in spaces of vulnerability sets further ground for the misrecognition of their identity. As pointed out by (Small et al., 2010) some sociologists pursue the narratives that seek to associate people's resilience, including their ability to cope with stigma, with their cultural identity. It is from such narratives that the misrecognition of the informal dweller as an irresponsible subject gather momentum.



Example of a Pit



Complete Pit Toilet

Figure 7.4: Makeshift Toilet
Source: Author (2018)

7.3.2 Framing liveability in context of vulnerability: Implications on production of space

The informal dwellers response to their tenure deprivation starting with the holes of informality in the urban fabric, are very often state made. As a result, the informal dweller's rationale for livability emerges from a position where land quality is given less prominence. Thus, the misrecognition of the informal dweller based on the conditions of their living environments is, in my view, misplaced as it omits the disparities in accessing resources key to the production of livable spaces. As noted by Robert Dahl (cited in Fineman, 2017) members of society equally depend on state sponsored institutions to provide resources that give us resilience. Meaning that, the state sets conditions that facilitate participation parity in environmental production. As I indicated, informal spaces emerge outside of formal planning processes, furthermore many are excluded from permanency. Consequently, those in waiting do not have the participation parity necessary to shape livable environments. They are left to depend on their capabilities¹⁶⁹ to create livable spaces. In the end, their process of place-making does not conform to the state's planning norms, as they conceptualize the idea of livable spaces from a position of vulnerability. Consequently, this dwarfs their possibilities of creating 'ideal' living environments. Nonetheless, many make an effort to create the 'ideal' liveable spaces, which they can inhabit.

A community activist* in Phomolong comments that land conditions did not even cross his mind when he was looking for a place to settle, considering other competing interests such as securing a place, which at that stage was a more pressing and immediate need. However, this is not completely a reflection of lack of environmental awareness. The empirical work in Phomolong and Jeffsville revealed that some informal dwellers have a positive attitude concerning environmental consciousness. They recognise the importance of the environmental character of a liveable place. Commenting on her conception of habitability a young female responded:

"A liveable place should be suitable, safe for kids and for yourself as well, and then it has to have water, sanitation"[Interview: the daughter*, August 2018].

Many are also conscious of the integrative implications of pursuing habitability within spaces of vulnerability [see section 7.4]. However, as I argued above, the resources necessary to create places with good environmental character are outside of informal dweller's capabilities. For that reason, they pin their hope on state institutions to facilitate such formalization. While in waiting, many have to readjust their normative conception of liveable spaces. Empirical evidence shows that for many this adjustment is achieved by framing the habitability of space around their basic liveability needs and whether a prospective settlement meets those needs. In consequence, life in spaces of vulnerability is not easy. As argued by Bohle (2007), to adapt and cope in spaces of vulnerability requires mitigating strategies.

¹⁶⁹ Capabilities in this context are mainly in relation to limited material resources and knowledge.

Despite these hardships, informal settlements continue to grow, both in number and in size. Many new people keep arriving, others were born there, and others aged there. When established by the City in 2002, Phomolong had about 240 households. The settlement has since expanded to (number) households. Similarly, Jeffsville, from its establishment in 1990, is today home to more than 10 000 households [ibid]. These continuous expansions are mainly driven by the perceived location¹⁷⁰ qualities – as argued above – to support the dweller’s basic needs. For the people of Phomolong and Jeffsville, that these settlements provide a basis from which to satisfy economic and social needs was reason enough for many to choose them as places for waiting. For instance, Pol* & Mamo*, were relocated from Jeffsville following the sinkhole incident, reminisce about the habitability of Jeffsville:

“Ja, it [Jeffsville] was fine but we would access things easily, we did not struggle with transport....Mamo adds: We were not starving.....Pol*: school were close for children, now it’s a distance”*[Group Interview: Pol*, Mamo*, August, 2018].

Pretty-Lady, a permanent dweller in Phomolong, also elaborates on how the settlement addressed their economic needs:

“We moved here with our mom after my parents divorced because we could not afford to pay rent” [Interview: Pretty-lady*, July, 2018].

These economic factors were also raised by Duck*, a young, displaced dweller of Jeffsville:

“My parents could no longer afford to pay rental and our school fees at the same. So it made sense for us to move to the settlement”[Interview: Duck*, July 2018].

For some, like Chri* and Nto*, the settlements provided an opportunity to sustain their social needs. Considering they were able to maintain the family unity within the vulnerabilities of the settlements:

“I wanted to be my own man. I had a family so I needed to build my own place. I did not even think about the soil conditions”[Interview *Community activist*, July 2018].

Sentiments about family were also shared by Nto*:

“I came from another province to join my husband” [Interview Nto*, July 2018].

Although spaces of vulnerability offer the opportunity to address basic needs - economic and social - to survive informality as habitability demands great adaptation. The ward councillor in Jeffsville relates how the settlement supported his ambitions as a young student:

“I came to the settlement as young student. It was not easy though, especially if one is new to such an environment. “I remember rats eating my nice new winter jacket; eating my bread from within. But with time I became smart and started wrapping the bread”. ”[Interview ward Councillor, July 2018]

For those waiting for permanency, liveability in informality is about survival. Hence, in the end the economic and social benefits of a settlement surpass its environment limitations. As Eizenberg &

¹⁷⁰ Jeffsville: Situated in Atteridgeville, accessible 0,5 km off the Maunde road, the main road in Atteridgeville. The settlement starts within the borders Atteridgeville township. [also see appendix 9].

Phomolong : Situated in Mamelodi East , along the Solomon Mahlangu Drive. Like Jeffsville, Phomolong borders the Mamelodi east township. The settlement was established by the City in 2002, with about 240 structures relocated from Marabastad (see chapter 6).

Jabareen (2017) implicitly put it, higher levels of inequality overshadow the environmental concerns. The City's response to spaces of vulnerability fails to ensure equal opportunity for creating spaces with safe environmental conditions, as suggested by Fineman. Thus, to simply frame the poor environmental conditions in informal areas as a measure of poor values would be masking the inequitable state's response to vulnerability.

In sum, this section described the lived experiences of informal dwellers, including those waiting for permanency. I paid particular attention to their environmental conditions. This was done to make space for marginalized voices in the City's environmental politics and to speak back to the misrecognized and misframed representations of informal spaces. It also brought to the fore a situated understanding of how processes of environmental production can, at times, create unjust spaces.

So, how are residents in places like Phomolong and Jeffsville, severely strained by vulnerability and misframed as responsible for their vulnerable living conditions? How do they pursue their claims for recognition and distribution in the sustainable development agenda?

7.4 Formalizing spaces and the implications on misrecognition and Misdistribution

The problem with misframing is that it individualises accountability for success, as a result overlooking the inequity of the entire system. The argument that formalization seeks to transform informal settlements from being spaces of vulnerability into sustainable human settlements has been sufficiently explained. I, however, argue that the role of formalization in shaping sustainable environments is contradicted. As I will illustrate in this section, formalization – wittingly or unwittingly – shoulders the production of sustainable environments to its beneficiaries, the permanent dwellers. This, I argue here, creates lived experiences that breed the misrecognition of identities. Formalization's overall approach to sustainability focuses on improving the Quality of Life (QoL), through spatial restructuring. This entails the redistribution of land tenure and basic services (the permanent stands). Thus, the QoL dimension envisaged by the UISP, through formalization, is that of the physical environment. I argue, therefore, that formalization approaches informal spaces as just a static nonresponsive collection of shacks. In this way, disregarding that lived experiences are simultaneously embedded to and relational to space. To understand the role of formalization in the transformation of informal settlements, in this section, I introduce Lefebvre's spatial triad on the production of space, into the process of formalization. I suggest here that Lefebvre's considerations of space have the potential to generate insights on formalization as a process of space production.

The state perceives permanent spaces as suitable living environments. However, observing the lived experiences emerging in formalizing¹⁷¹ spaces in Phomolong, I argue that, from permanent spaces emerge contradicting lived experiences among the permanent dwellers. On one hand, permanent spaces are perceived as places that support a desired way of life. This can be seen in how the permanent spaces have positively altered the meaning of places, to the extent that informal environments are now places of positive social interaction.

On the other hand, the lived experiences in permanent spaces reactivate the spaces of vulnerability. For instance, the communal provision of waste and sanitation services in formalizing spaces generates conditions that perpetuate the lived experiences of informality. I argue that those lived experiences breed perceptions that ground the misrecognitions of the permanent dweller. In the end, formalization has not shifted much, as those with permanency, similar to those in waiting, continue to shoulder the environmental burden, and the misrecognition as being irresponsible.

7.4.1 Carrying the environmental and social burden of impermanency

Impermanency, meaning waiting for permanency, has become the embodiment of the struggles for the recognition of identity for the subaltern class in South African spaces. This, I argue is a consequence of the failing formalization system [see chapter 6], which restructures the social order not only by delays and insufficient delivery, but equally so by segueing the environmental burden of informality to those in impermanency. As argued by Fineman (2010), system failures can perpetuate inequalities in the social structure, by privileging some, while others remain relatively disadvantaged and left to cope with their shared vulnerability on an individual level. Formalization aims to address spatial injustices in informal spaces, through the redistribution of resources (the permanent stands). However, many are excluded from the formalization process. This is mainly as a consequence of the implementation challenges facing the City, in particular by land politics [see chapter 6], which manifest in a long and frustrating wait for many. Some settlements like Jeffsville, for instance, though earmarked as beneficiaries of the City's formalization programme, are left in waiting. As highlighted by a city official, Jeffsville cannot be formalized due to its unsuitable land condition. However, the City does not have adequate vacant land to relocate the people of Jeffsville, leaving many waiting. This impermanency is becoming deeply normalized that it even coexists with permanency. Phomolong, for instance, is currently formalizing, however, like in Jeffsville, the formalization process is challenged by land-related issues [see chapter 6.]. A ward councilor commented that the completion of the current formalization process hinges on the availability of adequate relief land¹⁷².

The lived experiences of those who continue to pursue tenure from within the position of impermanency can be understood through their environmental burden, evident from their daily struggles of accessing basic services. Inadequate services are some of the elements through which we can define the environmental impacts of informal life (Napier, 2002 in Nassar & Elsayed, 2018). Those in waiting, for example, continue to live in cramped spaces, relying on informal sanitation systems like pit lavatories and informal waste disposal methods.

In these spaces waiting is not only from people, but even waste also lies waiting. Solid waste dumps are a common sight in informal settlements, including Phomolong and Jeffsville [see figure 7.9]. The waste collection services to the settlements are inconsistent, limited and sometimes nonexistent. Unlike in most formal spaces where waste collection by the City is a weekly occurrence, there is no fixed schedule for those in waiting:

"Waste collection services to the informal settlements is a 'by the way' type of thing. These finance guys are ruthless, they cannot extend a service where there is no payment" [Interview: City official, August 2018]

Many of the residents, in both settlements, commented that at some point the City started a solid waste disposal system that included the issuing of refuse bags to households. This waste management strategy was generally welcomed by its recipients. But the potential of the system was diluted by the

¹⁷² Additional land to relocate the people to.

City's inconsistent collection system¹⁷³. Hence, some of those in waiting, like Moruti* and his neighbors, continue to use informal solid waste disposal means:

"We throw the rubbish behind the wall"[Interview: Moruti* July 2018].

Residents of Phomolong and Jeffsville are somewhat mindful of the health and safety implications of the spatial practices emanating from their underserved environments. To some of the parents like babyMom*, that children use solid waste dumps as playgrounds is even more of a concern:

"There are rats, flies and the children play with the dump"[Interview: babyMom*, July 2018].

This observation was also highlighted by the ward Councillor:

"The young and the aged are most vulnerable to waste related vulnerabilities. They are eaten by rats"[Interview: ward Councillor, July 2018]

Children are also most vulnerable to the risks posed by informal sanitation waste systems. Pit toilets are the most common means of accessing sanitation in informal settlements. In the absence of sanitation infrastructure, households in Phomolong and Jeffsville, dig their pit and build makeshift toilet structures to preserve their dignity [see figure 7.4]. Incidents of children drowning in pit toilets are not uncommon in South Africa. A prominent case of such misfortune happened in 2014 in Chebeng village, Limpopo province. Five-year-old Michael Komape¹⁷⁴ died after falling into a pit toilet at his school [Mail and Guardian, 12 June 2019]. Other similar incidences have been reported in other underdeveloped areas. The children of Phomolong are amongst the most vulnerable to this potential risk, because the area is flooded with old pit toilets. Unlike in Jeffsville, the pit toilets in Phomolong fill up quickly¹⁷⁵, compelling the resident to dig new pits more frequently than in most informal settlements [As shall be seen in section 7.4 these pit lavatories reproduce vulnerabilities in formalizing spaces].

These sanitation struggles also magnify the effects of the politics of land deprivation on social life. The spatial formation of informal settlements is characterized by limited living spaces, which implicates the number of toilets that can be dug in one yard. Thus, unable to dig further pits, most of those in waiting end up without dedicated family toilet facilities. As noted by Makhi* they usually turn to other alternatives to access toilets:

"Our toilet is full so now we have to go to the station"[Interview: Makhi*].

Other's like Mamtn* rely on their neighborly relations for accessing sanitation

"I share a toilet with my neighbours"[Interview: Mamtn*, July 2018].

¹⁷³ Although the city has a weekly waste schedule, it nonetheless fails to abide by its set collection programme

¹⁷⁴ Section 27 - <https://section27.org.za> has comprehensive on Michael Komape case.

¹⁷⁵ A City official associates this phenomenon to the geology of the settlement. According to the official the water table in Phomolong is very low.

This is a universal phenomenon as, in some instances, toilet sharing is not always done in consensus.

“My mom does not like us sharing a toilet, so we lock our toilet. Otherwise, while you are sitting here you will see ashy ankles that you don’t know through the bottom of the toilet door”[Interview: babyMom*, July 2018].

Thus, the struggles to access toilet facilities hinges on social relations. At times, those social relations are communicated through sanitation waste. As illustrated by Makama*, at times, conflicts would be tussled through waste:

“If someone does not like you, you will find plastic of waste on your doorstep when you wake up” [Interview: Makama*, July 2018].

The sanitation struggles in informal settlements also create a public health nuisance for the settlements. Because informal settlements lack sanitation infrastructure, the people have no formal means of disposing of their used bath cleaning and laundry water. As a result, wastewater runs through the settlements. In Phomolong and Jeffsville the residents create a makeshift furrow to throw the used water into and to channel the rain waters. In Phomolong some of the furrows are now also serving as dumping sites for solid waste [see figure 7.6]:

“Water used to easily flow in these furrows, but people started throwing rubbish in them because they are quite deep actually”[Interview: babyMom*, July 2018].

Arguments about ‘understanding how place relates to health’ (Cummins et al., 2007) have been presented in literature. Lemanski (2020), for instance, illustrates that poor sanitation system overwhelmed by heavy rains expose dwellers to infectious diseases.

“You will find children play with drain water. Immediately after that they move to touching their food with those dirty hands”[Interview: Ward councillor- Jeffsville, August 2018]

The concerns about the intergenerational vulnerability arising from informal settlements arise again. Considering that Cummins et al. (2007, urge us to recognizing that individuals can become relationally embedded in multiple health damaging and health promoting environments.

The struggles to access sanitation waste and solid waste extend to freshwater access. The informal settlements generally rely on informal means to access the City’s water networks. Some in Jeffsville devised creative means of sourcing water from the City’s water network. Through this system they are able to have water taps in their households. However, this makeshift system has its limitation:

“You have to wake up early if you want to get water. Otherwise the water pressure would go down once many people are on the network”[Interview: Cheesekop*, July, 2018].

This is not universal. In some instances, the City makes efforts to provide water services to the settlements. For instance, in Jeffsville, most of the community members access their water from the water tanks erected by the City at strategic points around the settlements [see figure 7.5]. This service also has vacuums, as it frequently encounters disruptions:

“Sometimes the water delivery truck does not come. When the council did not pay them” [Interview Kat*, August 2018].

Inasmuch as those in waiting perceive their living environments as an environmental burden, they have no choice but to adapt their lived experiences, in ways that they cope with those burdens.



Figure 7.5: Water Supply Methods in Phomolong
Source: Author (2018)

Thus, waiting for formalization has not only individualized the responsibility for environmental burdens, it has also split the struggles for the misrecognition of identities. While those with permanency are acknowledged as legible to good living environments. The claims of those in waiting for ‘just’ environments are not fully recognized by the City. Thus, they continue to be misframed as an irresponsible “group of intruders, who have corrupted the system” (Swyngedouw, 2009:612), sabotaging the bio-physical urban development imaginary of a sustainable city. This is the beginning of what Swyngedouw (2009) calls the “classic examples of a fetishized and externalized foe that require dealing with if sustainable urban futures are to be attained” (p:612), which attracts the blaming of the individual and not the failing system in experiences of environmental injustice. Fineman (2010) brings our attention to the shifting of blame and its implications on framing the narratives about vulnerable subjects. She argues that: *It is important to recognize a range of vulnerabilities. That some manifestations of vulnerability are clearly beyond individual or even societal control, while others can be cast as self-induced. Because without this clear distinction individuals bear responsibility regardless of the manifestation of their vulnerability* [p: 267].



Figure 7.6: Furrows in Phomolong and Jeffsville
Source: Author (2018)

7.4.2 Contradictions of perceived spaces of formalization

Permanency, to its beneficiaries, the permanent dweller and equally so to those in waiting represents an opportunity to reimagine their lived experiences. The idea of permanent stands, for instance, proposes better living environments. However, there emerge conflicting perceptions about permanent spaces. On one hand, permanent spaces are perceived by the permanent dweller as improved living environments. Yet on the other, permanent spaces are perceived as somehow stagnant. In this section I engage with Lefebvre's Triad of spatial production to make lucid how permanent spaces gives contradicting 'spatial values' (Roy, 2011).

- The triad

Here, Lefebvre (1991) makes an argument about the production of space as constituted by three elements: the spatial practice (perceived space), representations of space (conceived space) and space of representations (lived space). For Lefebvre approaching space as collective of the three spaces will lead to a better understanding of the social life. Lefebvre sees each of the three spaces individually feeds into the functioning of social life. For instance, the experiences in the perceived space will be mediated through conceived space expectations into lived space, meaning that space is multifaceted, it does not only exist as a physical formation or how we perceive it, but also how we live it. The formalized¹⁷⁶ spaces, conceptualised as permanent stands, are conceived space, described by Lefebvre as space of scientists, planners, urbanists, technocratic subdividers and social engineers. As clarified by a city planner, in the City of Tshwane, the envisaged layout and functioning of permanent spaces is captured in the site development plan established by planners and engineers.

As argued by Lefebvre, we draw our perceptions about space from how it was conceived, in turn those perceptions influence how space is lived. The formalizing parts of Phomolong, for instance, are starting to reveal the spatial imaginaries conceived through formalization. For starters, there is a clear differentiation between private and public spaces [see figure 7.7]. The private spaces, the permanent stands, are well-demarcated and orderly, often fenced. These private spaces are also enveloped by a new public spaces, constituted by a newly established street network. This spatial restructuring observed in Phomolong has started to influence new ways of how space is perceived and experienced, in both private and public life. The newly established street network is creating new meanings of space, allowing it to be reappropriated by its inhabitants, to meet the re-envisioned consumption needs. For example, unlike in the informal spaces, school children are better able to create childhood memories within more pleasant settings as compared to in squatter environments. The street network gives them a perception about permanent spaces as a better environment for socializing. During my fieldwork, I observed school children in larger groups, talking and engaging in various childhood games after school. For the communities small businesses owners, the new street network created perceptions of better businesses exposure. They are now able to display their stalls' goods along the wide streets.

¹⁷⁶ I frame formalized spaces as those informal settlements that have been had intervention right through the formalization process.

In addition to these re-imagined social public interactions, the inhabitants of permanent spaces are now able to practice social rituals. Lefebvre contextualizes lived spaces as directly informed not so much by conceived spaces as by associated cultural memories (Leary-Owhin, 2015). However, based on how they were conceived, permanent stands attach meanings to spaces that enables the practising of social rituals. For instance, a weeklong mourning of the deceased, followed by a night vigil on the eve of the burial, is one of the rituals generally undertaken in most Black South African communities. These rituals are almost impossible in informal spaces, given the lack of space to accommodate the mourners, as illustrated by Pol*, a young lady in her twenties:

"You see because we have no space when someone dies, we have to take them back home to be buried"[Interview: Pol*, July 2018].

However, those with permanent spaces are able to perform the ritual practices:

"It is now your house, when you are dead your coffin will come out of here. It will not leave from the squatter camp. Akere it was a squatter camp before and when you are dead they would go and bury you at your parents' home. Now it is permanent you know that if I made a bedroom, my coffin will be placed here and it will leave from here. So, I must make improvements, cause we must also 're tshabe matlho a batho' meaning 'I will be buried in dignity, my coffin can now leave from here'"[Interview: Makama*, July 2018].

In this way, the conception of formalization seemingly facilitates lived experiences in ways that positively redefine the connection of the people to space. Having said that, the intersection between the conceived and the lived experiences creates 'spaces of negative user value' (Roy, 2016). Here, the lived spatial practices emerging in formalizing spaces reproduce conditions that perpetuate the misrecognition of the permanent dweller identities. Formalization prescribes incremental provision of basic services, such water and sanitation, to formalized spaces. The starting point of this process, as explained by a City official:

"Is by providing: those 'legitimised' by the system as beneficiaries of permanency, with some rudimentary services, whilst the City awaits the final approval of the site development plan for the formalizing settlement" [Interview: city official 3*, August, 2018].

The city provides rudimentary services at a communal scale for those formalizing. The City views this communal approach to service delivery as sufficient for liveability in formalizing spaces. For instance, in the formalizing sections of Phomolong, those with permanent stands are allocated communal portable toilet facilities. These are randomly placed on the streets in front of some houses, one toilet allocated for about six permanent households. According to the permanent dwellers, the City made commitment to maintaining these facilities by emptying and cleaning these are toilets about once a week. While the City has been making efforts to meet that commitment, those are undermined by the unanticipated overwhelming demand [see below]. Hence, the reception of sanitation services at communal level and spatial practices around it has been contradicted. For some dwellers, including Madevu*, sharing toilet facilities is not an issue at all. For others, though sharing with neighbours is acceptable, the problem arises when the communal service attracts 'undesirable' users. Although these communal ablutions are allocated for the permanent dwellers, sanitation is one of the daily

struggles of those in waiting, particularly due to the pit toilets filling up quickly in Phomolong. As a result, some of those in waiting have also started to use these communal toilets. While this 'unauthorized' use of the toilet facilities by those in waiting raises some contentions, another major concern for the permanent dweller are the undesirable user characters, like the passer-by intoxicated individuals and those frequenting local shebeens. These communal toilets have now become public amenities. Raising health concerns for some of the permanent dwellers, like Pretty-lady* who believes these communal facilities are a health hazard:

"We had a pit toilet. Now we have to share, for me, I had problem when I started using it. I goggle and they said it's a yeast infection. But I did not seat on the toilet I was surprised even in my own toilet I cannot sit. They said the cause be because of sharing a public toilet."[Interview: Pretty-lady*, July 2018].

Hence, to some, pit toilets despite their own challenges, are more preferred than the communal toilets. The city has however, communicated that no pit toilets are allowed in permanent spaces. In my view, the City is oblivious to these undesirable conditions created by the sharing of toilet facilities. Nonetheless, the city continues to do its best to bring services to formalizing spaces, through this communal approach. The supply of fresh water to formalizing spaces, is also delivered at communal level. The city uses water-tankers to deliver water on a daily basis¹⁷⁷. Settlement dwellers line parts of the new streets in queues, carrying drums and buckets, ready to collect water from the truck. This service is open to all community members, whether permanent or in waiting. This service is generally welcomed by many like babyMama*, for whom this service has brought stability and reliability in the water supply:

"When it comes to water, they are really taking care of us"[Interview: babyMama*, July 2018]

However, there are some concerns, that this communal delivery of water perpetuates unequal access. The water truck is scheduled to arrive twice a day, at mid-morning and again in the afternoon. Because this is during working hours, those who are at work are excluded from receiving water:

"People who are at work do not get water they have to ask their neighbours. They arrive her around 10 am, but remember that other people are work."[Interview: sisZ*, July 2018].

The scheduled stops and times are often a challenge, even for those who not at work. Missing the truck for whatever reason, could result in a household forfeiting its daily ration of water. This scalar of water provision not only creates unequal access to water, but it also burdens the people with carrying the water into their own homes. Women are most burdened by this practice. During my fieldwork, a respondent asked that we wrap up our interview as she had to rush to the waterpoint. I watch her taking a short cut through her neighbours' yard to access the truck in the next street, carrying 2 large drums of water. Before the formalization process in Phomolong, most of the community members had convenient access to water. Albeit through taps 'illegally'¹⁷⁸ connected to the waterpipe crossing through the settlement. For some in Phomolong, the taps created the convenience of accessing water

¹⁷⁷ I must note that the water from tankers is also accessible to those in waiting. But only through the permanent spaces, as the truck is unable to access the informal parts due its narrow, or non-existing, streets.

¹⁷⁸ I put illegal in brackets because I question the framing of illegal access when state processes are failing

throughout the day. According to dwellers, the City has since shut these down and introduced the water cart system in their place.

The vacuous patches of access to basic services in formalizing spaces can also be understood through the City's solid waste management plan, which is intended to provide convenient waste collection. The waste truck is scheduled to collect waste, once a week in permanent spaces. The permanent dwellers are also issued with plastic refuse bags by the City. The bags of rubbish are to be placed outside the properties on the schedule waste collection day. However, the City's waste collection service in formalizing spaces remains poor, similar to the areas in waiting. Waste is not frequently collected as planned, in consequence, the permanent dwellers resort to informal waste practices, such as dumping. In Phomolong, waste dumps lay bare and 'out of place' (Moore, 2012) extending into the newly demarcated public spaces exposing the City's poor waste management in permanent spaces. Some permanent dwellers like Nan* take the initiative to discard of their solid waste outside of the settlement. Some like Manicehair* continue disposing of waste through burning. For many others, including the waste 'bullies'¹⁷⁹, it remains business as usual, as they continue to dump waste on the street, creating unofficial communal waste dumps [see figure 7.8].

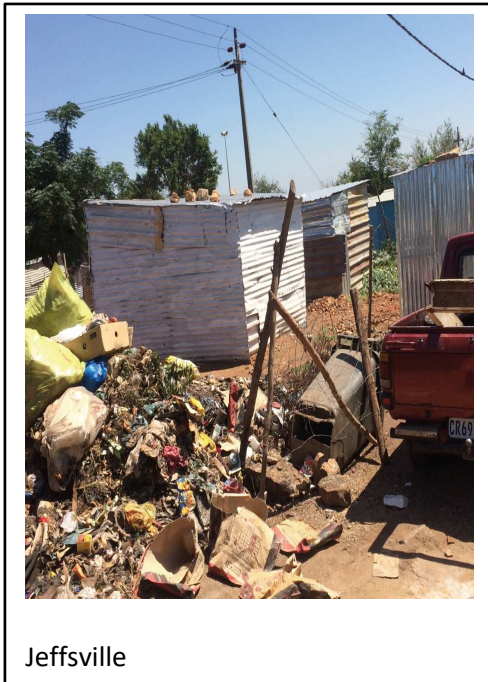
¹⁷⁹ *Waste bullies contribute to the waste dumps...they are very aggressive towards those who reprimand them.*



Figure 7.7: Private and Public Spaces in Phomolong
Source: Author (2018)



Figure 7.8: Waste Conditions in Permanent Area, in Phomolong
Source: Author (2018)



Jeffsville



Phomolong

Figure 7.9: Waste Scenario in Informal Section of Phomolong and Jeffsville

Source: Author (2018)

The lived experiences of permanent dwellers have not shifted much from those in waiting. In some instances, access to water and toilet facilities has actually worsened with formalization. For some like Makama*, using the communal toilets is an unpleasant experience:

“It was much better to have my own pit, cause if one has to go to the toilet it is tough decision whether I should go or what. You will be constipated for three or four days because you are scared of going there”
 [Interview: Makama*]

- Permanent dweller agency in invited spaces

Thus far, I have attempted to illustrate how permanency – meaning formalization – in a way produces new uninhabitable living environments, and reactivates basic services problems that were locally ‘solved’ by residents. My intention here was to two-fold. First, it was to show how power is exercised through access to service infrastructure in formalizing spaces.

Second, I needed to inform southern theory on how this power is exercised within invited spaces¹⁸⁰ (Miraftab & Willis, 2005). I draw parallels between permanency and invited spaces, to question the

¹⁸⁰ Miraftab & Willis (2005) speaks of ‘invited’ space being created by government and its internal partners and their tolerance only towards political actions happening within its structures. Only political actions within these spaces are preferred and

silence of the permanent dweller in the production of their spaces. In the production of space Lefebvre asks a pertinent question about *“the passivity and silence of the ‘users’ of space”* (p: 56). In this context, the permanent dweller is actively silenced by their desperation for permanency, which as I indicated in chapter 6, takes precedence to the spatial practices and the everyday lived space that it mediates. This ‘price’ is also illuminated through the consented acceptance of the communal provision of services in formalizing spaces by the permanent dweller. Rather than conflict, normally manifesting as service delivery protests by the informal dwellers, their relationship is now mediated by an unspoken consensus. This consensus, I argued, derives from the self-interest from both sides of the actors. The City wanting to satisfy the numbers-driven land tenure objective of the Upgrading of Informal Settlements Programme (UISP)- which informs formalization. This implies that for the informal dweller to participate in this invited space they must make some concession for its acceptance. On the other hand, by the informal dweller’s desperate desire to secure permanency-intentionally or unintentionally- they opt for silence allow the dominant hegemonic approaches to impose the appreciation of space as one dimensional even at the cost of worsening everyday life conditions. For Lefebvre (1991), this inability to appreciate space as triad unity is maintained by the hegemony of the ruling class through different means, including knowledge. I am, however, hesitant to say the permanent dweller lacks total knowledge concerning what constitutes a sustainable living environment.

However, considering that the production of space, as argued by Lefebvre, is an arena of power dynamics with the state as a key actor, serving the interest of capital, hence we can draw neoliberal explanations. Swyngedouw (2009) associates the rise of a neoliberal governmentality that has replaced debate, disagreement and dissensus with a series of technologies of governing that fuse around consensus. This means that it is conceivable that, for the land tenure desperate dweller, the desire for permanent spaces produced by the state would actively silence the aspirant permanent dweller. Nonetheless, by perceiving permanent spaces as superior and overlooking the ensuing lived experiences, the permanent dweller consents to cope with the environmental burdens of permanency. This, I argue, reinforces the misrecognition of the subaltern – the permanent dweller. As I have shown in Chapter Six, the beneficiaries of permanency learn to cope with those vulnerabilities, by devising coping to mitigating strategies, thus normalizing the provision of rudimentary services at communal level as sufficient for livability in formalizing spaces. I have argued how this not only raises concerns around uninhabitable living environments, but it also feeds into perceptions that breed the misrecognition of the permanent dweller identity as ‘degenerate’, further dismissing their claims for just environments even in their status as permanent dwellers.

While this section attempted to illustrate how the unspoken consensus on production of permanent spaces silences claims for environmental justice. The following section will demonstrate that with governance of permanent spaces, environmental justice becomes an abandoned cause.

7.5 Governance and the Struggles for Equity in Ways of Doing Waste

The previous section sought to illustrate that it is through observed 'spatial practices that perceptions and meanings are formed' (Lefebvre: 1991), in formalizing spaces. As I demonstrated above, the provision of services at communal level reactivates informal spatial practices, such as open solid waste dumping, from which meanings and perceptions that breeds misrecognition of the permanent dweller identity emerges. I will now illustrate how these misrecognitions play out in the governance of formalizing spaces. Drawing from what I frame as waste governance field, I argue here that those misrecognitions impede the struggles for the distribution of resources. Meaning, formalizing spaces, similar to informal spaces, remain marginalized from basic services such as waste collection, mainly due to their perceived status as irresponsible waste actants [see table 7.2].

The section deploys Bourdieu's nexus of interrelated concepts of capital, habitus and field, which I argue can contribute to an understanding of the waste governance field in formalizing spaces. Bourdieu's argument through this framework is that spatial practices are the outcome of the relationship between habitus, capital and field. This implies that how the field turns out is influenced by the structure of positions among actors and by the practices and perception of those occupying different positions [see box 7. 1]. Thus, as I deconstruct the waste governance field in formalizing spaces, I demonstrate some seemingly concerted actions, by the city, to undermine the claims of permanent spaces to equitable allocation of waste resources. These actions, I argue emanate from the perceptions of waste governance in the permanent spaces as a lost cause. Next, I demonstrate how such interpretations, in turn, exclude permanent dwellers from attaining socially acceptable ways of doing waste, consequently, reactivating environmentally uninhabitable living conditions. In the end, this exploration illustrates that "there are links between environmental issues and perceptions" (Dempsey et al., 2012:99). Thus, the section closes with an argument that the maldistribution of ways of doing waste (de Certeau, 1984) excludes those with permanency not only from environmental equity (Dempsey et al., 2012), but also from the spatial imaginary of the sustainable city.

7.5.1 Formalization, the habitus and the Tshwane's waste governance field

The discussion that formalization intervenes to create a social space that facilitates the participation parity of informal spaces in the sustainable development agenda has already been fleshed out. One of the ways to achieve this is by transforming everyday social practices, such as solid waste disposal practices, consequently imparting functional waste management capabilities to permanent spaces. As I have illustrated above, in Tshwane, one of the strategic intentions of formalization is to have permanent spaces as waste-free environments. This goal entails bringing permanent spaces into the City's waste management network through consistent weekly waste collection. In this way, formalization can be understood as a 'field of capital production' (Bourdieu, 1983) Bourdieu defines the field as social space which structures strategic action for control over resources which are construed as forms of capital- economic, cultural, social, and symbolic. Thus, the field is a terrain of power struggles. These struggles emerge, because the fields of capital production are structured in a manner which sustains the authority of those who possess it (Bourdieu, 1983). Meaning that, those with cultural capital continuously mobilize their capital to sustain claims and their position in the field.

The waste governance field, I argue, is a terrain for cultural capital struggles. As I show below, differences in resources generate subtle shades of habitus. Bourdieu frames our habitus as the ways in which everyday world of social practices is constructed and learned. For Bourdieu (1983), everyday world of social practices is cultural capital, which he argues, is embodied in our habitus. Meaning the manners, knowledge, and skills, arguably acquired through practices such as education and upbringing. The problem with this assumption is that it mistakes the habitus as a natural disposition rather than one that is culturally developed. Rather, argues Bourdieu, the habitus should be understood as deeply ingrained habits, skills and dispositions that we possess due to our experience. On the contrary, 'fields' are shaped by disparities in the distribution of the habitus, which ensue from the power struggles that determine the imparting the cultural capital. As a result, different actors in the same field possess different levels of cultural capital.

The argument that those entering the field in possession of less cultural capital will be at a disadvantage has been argued in the literature (Dubois, 2011). In the context of this thesis, I also argue that without equitable access to ways of doing waste, participation imparities emerge. As I will illustrate, drawing from the waste governance field in Tshwane, the waste cultural capital imparted by formalization in permanent spaces falls short of lifting permanent spaces to the socio-spatial practices of the middle class, which often become the norm or collective intention for society (Harvey, 2005). Meaning that, the waste cultural capital imparted by formalization does not re-orientate ways of doing waste in in permanent spaces, nor does it re-orientate everyday practices to meet the normative expectations. This, as a result, perpetuates spatial practices such as 'illegal' waste dumping. Despite these structural inequalities that are shaped by the disendowment of cultural capital, we continue to perceive the everyday social practices observed in subaltern spaces, such as permanent spaces, as deviant. In discussions that follow, I illustrate how this deficit waste culture becomes a platform for dominant rhetoric to sustain and justify action for further maldistribution of waste resources in permanent spaces. Consequently, further keeping permanent spaces from adopting socially

normalized ways of doing waste. Thus, the role of culture in everyday practices cannot be understated, as argued by Bourdieu, considering that capital forms the foundation of social life and consequently dictates one's position within the social order. Thus, the facilitation of equal distribution of cultural capital is paramount in fostering conditions to remedy unjust society. This will require that we pay attention to the structure of the field and its influence actors' abilities to acquire capitals. Thus, to have parity in the waste governance field will require that, formalization as a field of capital production, facilitate the redistribution of waste cultural capital (Bourdieu, 2005)

Bourdieu understood the social world as being divided up into a variety of distinct arenas or 'fields of practice, each with their unique set of rule, knowledges, and forms of capital. Field refers to the configuration of institutions that guide the efficacy of different capitals, as well as the capacities of different actors involved in meeting or achieving certain aims such as water provision or capital accumulation through the informal housing market (Bourdieu) In this setting, each field has structured, which is a "set of positions and practices, as well as its struggles for the position as people mobilize their capital to stake their claims within a particular social domain".

Thus, the concept of the habitus offers an insightful way to understanding social interactions. First, it clarifies why things are happening, and the way they are observed. To do so, Bourdieu ties various elements that informs the Habitus:

- *Actors' behaviours will be related to their position In the field (in legal terms , in terms of the sense of their place and those of other actors)*
- *Their behaviours will also be related to resources available to them, and their view of the field, including their ideological viewpoint and their perception of which issues are worth fighting for, this last being constructed from their position in the field. P:23].*

Bourdieu urges us to consider differences between Habitus- meaning one's practical orientation, and habits or tacit ways of knowing a automatically what is expected and what to do in different institutional settings. Habitus are not fixed habits. They are open to change depending on the amounts and types of capital individuals acquire as they move through social space (Bourdieu, 1983)

Box 7.1: Fields of Capital Struggles

7.5.2 Deconstructing the waste governance field in formalizing spaces - perceptions and environmental equity

Like in other fields, as envisaged by Bourdieu, the waste governance field in Tshwane is a social space of political tensions struggles and social conflicts¹⁸¹. In this space, there is contestations as actors struggle to achieve their objectives (Bourdieu, 2005). With this in mind, I argue that the waste governance field in formalizing spaces is overshadowed by a display of the tensions of perceptions among the state-society actors. The contestation here is about the redistribution of the waste resources and the ensuing waste practices. The permanent dweller and the city officials, as actors in the city's waste governance field, respectively draw conflicting perceptions about waste-related spatial practices in formalizing spaces. So, for the permanent dweller, once the waste is in the streets it becomes 'an object to be managed and governed' (Moore, 2012) by the City. The perception of the permanent is that their responsibilities to waste governance ends within the boundaries of their private spaces. Thereby raising conflict about whose waste is that (to handle and be responsible for).

In Chapter Five I discussed the City's challenges with the governance of solid waste. I illustrated how 'illegal' or open waste dumping was shown as one of the major challenges facing the City's overall environmental health. I also illustrated that although 'illegal' waste dumping is a general occurrence in the City it is more of a common occurrence in informal spaces. These informal spatial practices have been attributed to the inequalities in access to waste management resources. Although formalizing spaces are intended to experience improved waste management practices, they have nonetheless shown continuation of similar patterns of waste practices as informal spaces. These informal waste disposal practices are often in direct contradiction with the City's expectations of waste disposal in spaces of permanency. In context of formalizing spaces, illegal waste disposal is dismissed through misrecognition of the identity of the permanent dweller as an irrational waste actant. I argue that there is, however, failure from the City, deliberate or non-deliberate, to acknowledge that such informal waste practices are a manifestation a long-term inequality in the endowment of waste capital.

Bourdieu's concept of habitus offers insightful ways of providing a more complex understanding of these social interactions [see box 7.1]. The habitus raises an understanding that takes the debates on certain spatial practices, such as open waste dumping, beyond their usually biased and narrow interpretations. Thus, segueing from the perspective that 'relegating all social actions to some behavioral explanations about society as the absolute causal factor. Instead, as argued by Bourdieu, we need to acknowledge that our subjective decisions are conditioned by our habitus, which is arguably the social and economic conditions that structure the situation. Approaching the waste governance field in formalizing space from this understanding, can bring to light new insights

¹⁸¹ *Social conflict theory (Engels & Marx, 1848). The higher class will try to maintain their privileges, power, status and social position - and therefore try to influence politics, education, and other institutions to protect and limit access to their forms of capital and resources. Whereas the lower class - in contradiction to the higher class - has very different interests. They do not have specific forms of capital that they need to protect. All they are interested in is in gaining access to the resources and capital of the higher class.*

pertaining to informal spatial practices such as ‘illegal’ dumping are more than just bad or irresponsible behaviour.

This may also influence emerging perceptions about subaltern spaces and ensuing actions. Different actors in the same field draw different perceptions about practices of actors, conditioning their further action [see box 7.1]. Sarah A. Moore’s (2012) work on ‘garbage matters’, unpacks how such perceptions on waste are conceptualised. Here, Moore focuses attention on both the conceptual frameworks that are used to examine issues concerning waste and the political possibilities produced by understanding waste differently [see table 7.2]. This spectrum of standpoints offers space to deconstruct how the ideological views held by actors in the waste governance field are framed. According to Moore, whether viewed as hazard or risk, fetish or commodity, abject or affect, waste evokes conversations about development, justice, sustainability, and progress.

As discussed above, the logic of formalization is that both permanent and formalizing spaces, compared to informal settlement, will adopt socially normalized ways of doing waste (de Certeau, 1984). However, my discussion in section above illustrated how accessing these services at a communal level, in formalizing spaces, sustains the status quo on informal waste practices such as ‘illegal’ dumping. In formalizing spaces of Phomolong, for instance, the daily interactions of the permanent residents with waste is that of ‘waste as an abject’ [see table 7.2]. This, I argue, contributes to misframing the perceptions of the permanent dweller and their living environments as an irresponsible and ignorant waste actant. These dominant perceptions are in contradiction with those of the permanent dweller.

As actors in waste governance field permanent dwellers like Nan*, are mindful of the waste governance limitations in permanent spaces:

“This is a new place but it has dumping” [Interview: Nan*, July 2018]

In the view of the people, the City’s waste governance efforts are limited and inefficient not meet conceived idea about permanent spaces as a waste free environment. As a result, waste becomes an ‘abjection’ [see table 7.2] to be either expelled through private expulsion – such as burning in their yards – or through public expulsion – such open dumping in streets. For the permanent dwellers in Phomolong the ‘boundaries exceeded by waste’ (Moore, 2012) into their private spaces are not tolerable. Hence, it needs to be expelled by ‘its constitutive subject’ (Moore, 2012). As commented by a ward councilor in another context:

“But issues of rubbish they are on the street not inside your home, you pass them on the street, even though you are concerned but once you get to your house, they no longer affect you as an individual. No one wants to live with waste in their houses. ‘So as long as it is out of my yard” [Interview : ward Councillor, July 2018]

The people believe they have played an active role in the governance of waste within their private spaces. Thus, the City should know where the responsibility of the permanent dweller start and end

and where their own start. But this is not usually the case, as the City is not meeting its end of the bargain, and mounds of waste lie in public waiting to be acted upon. Moore highlights that waste has a way of enrolling other social actors in its elimination, giving it an important role in the constitution of society and space. Thus, 'illegal' dumping is in a way making a political statement about an irresponsible city. This creates a space for potential political dialogue between the city and the permanent dwellers. For braSA*, a permanent dweller, the open dumping is probably another way of the people communicating their frustration of uncollected waste to the city.

"Maybe that is how the people are showing the City of their frustrations with the limited service".....our government is irresponsible, because as you are saying the people have organised the waste, some people buy their own bags, still the government does not come to collect them.....Even through those dumps it shows the people are trying, so why does is the city not responding?"[Interview: braSA, July 2018]*

Rather than going to the street to voice their frustration through service delivery protests¹⁸², as is the case at times with many of those in waiting, the permanent dwellers exercise their political agency through waste dumping. Because, as suggested by a community leader in one settlement, there are other competing interests that more deserving of such energy.

"There are minor things that you cannot miss work because of like rubbish, its not that valuable. A house is something is more important to a person, even electricity, if you come home and there is no electricity for 2 days in a row your life starts to become affected. You may have bought meat for a month now its starts to spoil, so you see that it affects you directly"[Interview: Jeffsville ward Councillor, July 2018].

The actions of the of the permanent dweller towards governance is a display of political agency.

The City, on the other hand, seems to be of the view that formalizing spaces are provided with adequate waste resources and services, thus the its expectation is for the people to look after their living environments, which in the City's view they are not. As a result, the city interprets the public display of waste as something 'out of place' [see table 7.2]. This evokes the perception that the permanent dwellers are not are not averse to 'waste as filth' [see table 7.2], which under normal circumstances is something to be disgusted of [see table 7.2]. Furthermore, waste disposal by public display does not fit with the conceived idea of formalizing spaces, thus creating perceptions of the permanent dweller as lacking the values to produce socio-spatial order (Moore, 2012).

However, this is not altogether the case. In most instances, the permanent dweller shows some level of consciousness concerning the health implications of waste. This is evident from the permanent dweller's view of 'waste as filth' as intolerable. For instance, waste lying in heaps in formalizing spaces waiting to 'be managed' [see table 7. 2], is not static, it ages and decomposes. Some of the permanent dwellers like Bassie* voiced their concerns in this regard:

¹⁸² This news article, titled Fed-up Phomolong in Service Ultimatum: <https://www.pressreader.com/south-africa/pretoria-news/20140730/281526519190794>, exemplifies the service protest in Phomolong

“They throw pampers, dead dogs and place in front of the door. They also throw sanitary pads then they fly and enter our homes. That thing there is not healthy even its smell, for the children and for us” [Interview: Bassie*, July 2018].

However, while they believe they are doing their best in waste governance, they feel set up for failure by the City’s attitude towards waste governance. Attesting to this, a city official remarked that the actions of City and the permanent dweller are equally to blame for the unfolding challenges pertaining the governance of the waste practice in formalizing spaces (the field):

“I put the blame on both the communities and the City itself. Communities in the sense that when you throw the rubbish in front of your house without doing the necessary, putting it in nice plastics and making sure its disposed, when we come to collect that rubbish, will never go away. Then when the other person next door come and put the additional that is going to become a rubbish dump. So, our people are not considered when it comes to health-related issues. The City they are just giving the world an impression that things are hunky dory, even in informal settlements we are doing very less to sort make people’s lives easy”. [Interview: city official 1*, August 2018]

What is clear here is that the spaces of political dialogue around waste are deserted by both actors – the City and the permanent dweller. I agree with Swyngedouw (2009) that problems, therefore, are not the result of the system of unevenly distributed power relations, of the networks of control and influence or of rampant injustices and inequalities. Problems are instead blamed on an outsider.

		Actor Position and Perceptions about Waste [also see box 7.1]	
		Permanent dweller	City official
Waste as hazard	The concept of waste as hazard positions waste as a lens for studying the uneven inter and intranational distributions of waste disposal facilities and social movements, gender and racial politics, discourses of distributional and/or procedural justice that accompany them.		
Waste as a resource	Reframing waste as a resource addresses part of what is missed by thinking solely of waste as hazard. Waste as resource provides a view into such phenomena as: the impacts of formal recycling on the efficiency and sustainability of municipal solid waste management. While these constructions of waste sometimes centre the economic as the dominant and most important generator of value (both of objects and of holders of labor power),		
Waste as manageable	<p>["Other scholars conceptualize waste as an object to be managed and governed at different scales. [informal and formal scales]</p> <p>Questions that arise from this view of waste often involve the implications of waste management for urban sustainability (2007)</p> <p>Bulkeley et al. (2007), for example, propose an approach that highlights various modes of governance around the collection, transportation, and disposal of waste. Here, depending on various rationalities and strategies of governance, there are alternative ways of managing waste which imply more or less community and/or state control" (Moore, 2012)</p>	<p>Continue with informal waste practices</p> <p>Not enough resources</p>	<p>We give them enough waste resources to</p> <ul style="list-style-type: none"> •Clean spaces •Responsible dwellers
Waste as a commodity	In contrast to the concepts above, the notion of waste as a commodity provides understandings of the patterns and processes involved in trading waste (both hazardous and solid), particularly between nations.		

Waste as 'out of place'	Because dirt, waste, and other sources of pollution are culturally determined and identified by their tendency to transgress categories, they prompt strong social sanctions that exclude certain practices and groups of people deemed as unclean, to produce socio spatial order. Here, then, waste is a fundamentally geographical problem (Moore, 2012)		
Waste as filth	Waste, in this account, is imbued with and defined by the profound ability to disgust and to enrol other social actors in its elimination, giving it an important role in the constitution of society and space. The disgust and revulsion provoked by waste become powerful political forces: 'This is the political possibility of affect as a response where different becomings might emerge – without such responses there can be no ethics of responsibility' (Hawkins and Muecke, 2003: xiv, in Moore, 2012)	Keep it outside my yard-throw out, burn	So don't bother
Waste as risk	Waste as risk has in common with waste as hazard an emphasis on danger and toxicity.		
Waste as governable object	Here, careful attention is brought to the way that waste became a distinct object for state management and means of controlling certain populations through scientific theories of disease and contagion		
Waste as abject	In the case of waste as abject, processes of expelling wasted objects, places, and people are essential to the production of modern spaces and citizens (Moore, 2008, 2009). Because abjection is always incomplete, waste constantly threatens to destabilize sanitary spaces and subjects (Moore, 2012).	Waste encroaching on private space: Keep it outside my yard	

Table 7.2: Moore's waste perspectives: Framing the waste governance field in Tshwane

7.5.3 The permanent dweller and the struggles for position as spatial representations of environmental justice

In this last section of the chapter, I place permanency in spatial relation to informality to question the representations of permanent stands as sites of environmental justice. I argue that formalizing spaces struggle to 'prises de position' (Bourdieu, 1983) in the City's normative ways of doing waste. This I argue flows from the misperceptions formed by city actors in the waste governance field, consequently misrecognizing the permanent dweller as an irresponsible waste actant.

The logic of formalization is that permanent spaces, compared to informal spaces, will be in a better position regarding their access to services such as waste management. On the contrary, formalizing spaces seem more like glorified informal spaces. As discussed above, formalizing spaces continue to have waste management experiences similar to those of formal spaces. In Phomolong, for instance, there is no significant indication of shifts in waste management resources to support the organized spatial logic conceived by formalization. Instead, there is an explicit expectation for shifting the habitus without the necessary resources. Meaning that the permanent dwellers are expected to act permanent, by shifting their habitus in relation to their waste practices to match their permanent status. John Friedmann (2005) speaks of escaping the habitus, which he insinuates is possible through learning new skills, a discipline, a new rhythm of life, a new sense of time. He argues however, that these elements have to be deliberately imparted. However, the adjustment of the permanent dweller to the new habitus is almost expected to be automatic and to happen without the material elements that sustain and explain the new habitus. Thus, expecting the permanent dwellers to have new ways of doing waste, without an adequate allocation of waste management resources, systematically excludes them from access to the City's waste culture.

This development undermines the essence of formalization which is to transform spatial practices. Bourdieu (2005) frames this as struggles for cultural capital. He argues that the tensions in the struggles for position emerge because, the higher your cultural capital, the higher the position you have in society - with those entering the field likely to collide with gatekeepers who seek to conserve the status quo. For instance, in Tshwane, there are some traces of financial reasons standing in the way of equitable allocation of waste management resources. One official commented that waste management to informal spaces does not endure equal focus:

"The budget for informal settlement will never be the same as that of other areas. Actually, the service of informal settlements is a 'by the way'. It's an additional..... Bureaucrats are very cruel, more especially the finance guys they want to direct the money where there is spin-offs. So, they are not going to throw money into a whole and not get something in return"
[Interview: city official 1*, August 2018].

This view contradicts the seemingly existing appetite for adopting normalized, socially acceptable ways of doing waste among the permanent dwellers. Some permanent dwellers like Nan*, for instance, regards this desire for functional waste management as a course worth pursuing:

“They [sic....other community members] say there is going to be a meeting and many people are saying we are going to talk about this dumping, if we speak about it in the meeting maybe they will send people to remove this filth”[Interview: NaN*, July 2018]

However, there is a disjuncture, as the City is despondent and seems to perceive the waste governance field in formalizing spaces a somewhat of a lost cause, and not worth fighting. As a city official recounted:

“Yes you get tired cause I am working with a lady who called E, she is responsible for waste management she will go there full force and do an operation, we go there as collective, to kill the illegal dump, after 2 weeks they come back and throw they rubbish at the very same place you have just cleaned, so how do you rehabilitate such people.”*[Interview: city official 1*, August 2018]

In sum, exploring formalization through the waste governance field also unravels the limitations the state’s responsibility to sponsored institutions in facilitation on redistribution (Fineman, 2010). What this argument has shown is that the waste governance field in Tshwane serves as fertile ground on which city actors locate their justification for unequal distribution of waste cultural capital. As argued by Cresswell (1996) meaning about space is invoked through the practices of the people who act according to their interpretations of space, which in turn, gives, their actions meaning. The City, to some extent, acknowledges its contributions in the inequitable distribution to the ways of doing waste. In the view of city official 1*, this oversight could be attributed to the City’s lack of vigorous programmes that ensure informal spaces are cleaned to the nitty-gritty. Despite this acknowledgement, the City maintains its justification of inequitable redistribution of waste resource, based on misrecognitions that devalue the permanent dweller as an irresponsible polluter, not completely worthy of significant waste resource allocations. In the end, these arguments serve to gatekeep the permanent dweller’s access to the City’s waste culture. Here I seek to build an argument that the permanent dweller never becomes legitimized or validated, instead they remain secondary citizens. Here we have a collective subject that is a compound of both status and class, that suffers the injustices of both maldistribution and misrecognition.

7.6 Conclusion

In closing, this second chapter of my empirical analysis shows that through the continuous inequality in redistributing resources in formalizing spaces, the City is not only depriving the permanent dweller from attaining ways of doing with waste, but it also leads to the exclusion of permanent spaces in the City's sustainability imaginary. In particular, I argued that formalization, in this current form, has failed to dismantle the misframing of the informal dweller identity, which in turn has spilled towards the production of misrecognized identities. Thus, mobilizing permanent spaces as a representation of sustainable development and environmental justice, exposes the hollow environmental justice pledge of formalization. In the case of Phomolong, what we see is that the physical transformation of permanent spaces, contradicts its very objective. Meaning that they are unable to shake off the poor living environments associated with informality.

This development, I argue, demands that we rethink how governance interventions such as formalization in Tshwane, and their claims of environmental justice, considering that, as noted by Dunion (2003 cited in Eizenberg & Jabareen, 2017) "*environmental injustice is experienced as a result of practices or policies, which, intentionally or unintentionally, disparately impact the living conditions of people in low-income groups*"(p:7). In the end, this also highlights the governance limitations of formalization in fostering cultural democratization, interpreted by Bourdieu as being about giving people the means to possess culture instead of, naively or not, pretending to give them culture. Thus, rethinking formalization should extend beyond the narrow approach of redressing only the material exclusion. Rather, addressing the misrecognition of identities should be at the center of those efforts. As argued by Fineman "*recognition of the vulnerable subject is theoretically important to because it allows us to simultaneously critique the suggested reconstruction of social arrangements*". In conclusion this chapter has provided a critical deconstruction of the entanglement of formalization with the remedying of injustice. More specifically, the chapter sought to problematize how formalization frames justice as an issue of material deprivation, thus seeking intervention in the form of permanent stands. While such spatial interventions have the potential to be a vehicle for inclusivity, they depoliticize the vulnerability of dwellers, in this way dismissing their claims as vulnerable subjects. This, consequently, dismisses their claim of state intervention into matters of their environmental justice and vulnerability. In the end, the permanent dweller remains trapped in the subaltern discourses.

CHAPTER 8

CONCLUSION

While informal settlements can be instructive sites of observation and action for understanding the production of environmentally just spaces, they can escape our urban sustainability imaginaries with ease. This thesis, therefore, set out to explore these realities through a case of formalization in the City of Tshwane. In this concluding chapter, I present a thematic account of those findings. It starts with a discussion on sustainability and informality, the nexus and governance, followed by reflection on [mis]carriage of environmental justice. I end with a consolidated discussion on the implications of permanency on research. The chapter concludes with a consolidated reflection on the blind spots of my thesis and how they direct an opportunity for future research on these issues.

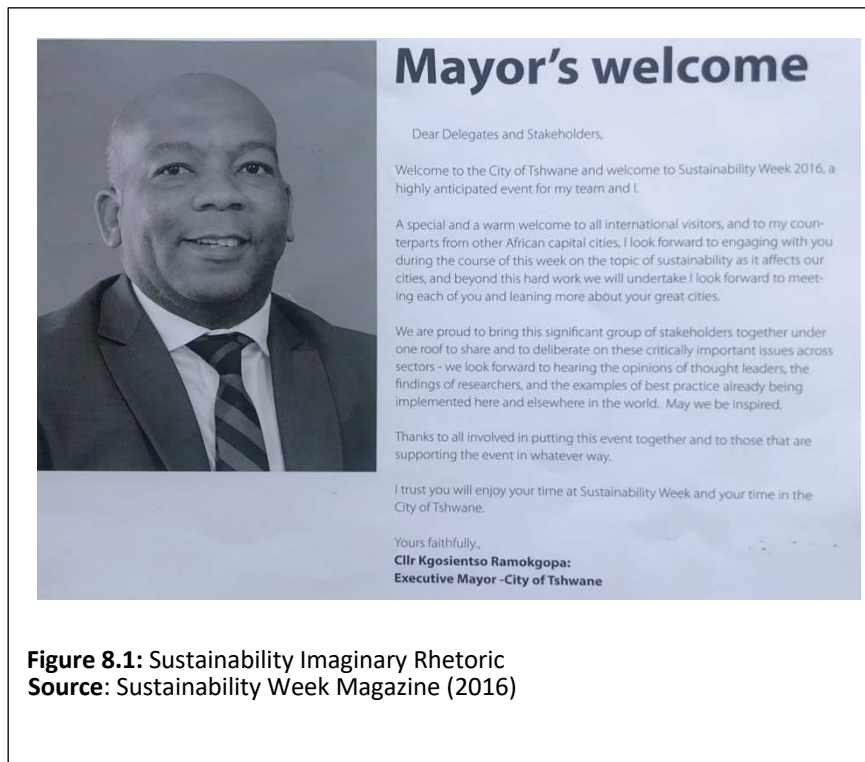
8.1 Findings: what permanency brings into view

As aforementioned, my aim with this thesis was to understand the socio-political and environmental implications of sustainable urban governance on informal spaces. I paid particular attention on how this approach from the radar of the sustainable city paradigm, given its northern and mainstream perspective on the environment.

- [sustainability]

In Chapter Two, I developed an argument that demonstrated how the notion of sustainability found expression in urban governance discourses as a catalyst of producing a 'just city' (Fainstein, 2015). However, postcolonial and southern theorists in particular have thrown criticism towards the efficiency of sustainability in the global South. In turn, there have been calls for a 'just sustainability' (Agyeman et al., 2002), a move towards a form of sustainability that embodies environmental justice. Having said that, I should also add that such shifts were predominately conceived against the backdrop of the Western conception of the 'urban'. As I have shown in Chapter Five, this conception has shaped the framing of sustainability as a predominately environmental concern in Tshwane. Moreover, I also showed that sustainability has been grounded in the City of Tshwane not only as a policy objective to direct environmental governance, but also as a tool for mediating city diplomacy and politics. I argued that Tshwane's pursuit of sustainability leadership through the African Capital Cities Sustainability Forum (ACCSF) has provided a launching pad of 'city diplomacy' (Acuto et al., 2017; Kosovac et al., 2021) for African leaders aspiring to sustainability. This desire for intercity engagement on urban sustainability is captured in Ramokgopa's welcome address to the 2016 ACCSF [see figure 8.1]. I also discussed how the establishment of Tshwane's sustainability Unit was instrumental in the City's pursue of city diplomacy, undertaken through enrolment into various international environmental governance networks. In this way, empowering urban sustainability to facilitate the diffusion of 'soft power development' (Manfredi-Sánchez, 2021). By transporting capitalist sustainability discourses to diffuse in local environmental governance in ways that compromise local environmental context, such as that experienced by the city's informal spaces. What this illustrates is merely the changing face of hegemony, while environmental challenges remain for the city's informal settlements.

In turn, the efforts to reconcile urban sustainability with the idea of 'city without slums' has propelled me to share Roy's (2014) sentiments that *"accumulation, and even dispossession, can proceed not only through superfluity or abandonment but also through paradigms of inclusive growth"* (138). In turn, I argue that for postcolonial scholarship to make headway in dislocating Northern discourses, will require that we interrogate not only the inequity and injustice resulting from, among other things, racism and classism are bad for the environment and bad for a broadly conceived notion of sustainability, as suggested by (Agyeman et al., 2002; Agyeman & Evans, 2004; Agyeman, 2008). Rather, we should also look our framings of justice and equity.



- [The nexus]

To frame justice and equity, I employed a nexus intersecting the concepts of informality, sustainability and environmental justice to the case of formalization in Tshwane. Drawing on postcolonial and southern theories, I translated this nexus into an analytic framework to understanding environmental governance in informal spaces. Southern theory and Situated UPE -- a new perspective of Urban Political Ecology - have been instrumental in giving the nexus its theoretical foundation. As I emphasized in Chapter Two/2, the nexus does not posit as a substitute for southern theory. Rather it positions as a theoretical framework of analysis through which we can 'learn anew' (Lawhon et al., 2014) about the production of living environments in marginalized spaces from a perspective of southern cities. In particular, the nexus calls into question the dispensing of environmental justice to marginalized spaces. The novelty of the nexus lies in its provincialization of formalization, through a key concept of permanency, to explore the socio-environmental implications of informality-directed governance interventions, in post-apartheid South Africa cities. Permanency made space for alternative voices on the production of the living environments. This allowed me to pay more attention to power asymmetries underpinning the production uneven of uneven environments in marginalized spaces.

- [Governing with formalization/permanency]

So, the idea of permanency came out as a more provincialized way for critically engaging with formalization as a technology of power in governance. As shown through Chapters Six and Seven for both the City of Tshwane and its informal dwellers, the idea of permanency turned into a base for situating informal spaces into the city's urban governance radar; and has also become a lens through

which the people of Tshwane's informal settlements [including city officials] articulate their understanding of habitability and living environments.

The idea of permanency was never a topic I set to investigate formalization, but it became a locus through which we can learn how the state's 'spatial practices' (Dikeç, 2007)- including formalization- are instrumental in localizing policy ideology and fostering new forms of social control, with environmental implications. To untangle these, at times contradictory political ideologies obscured in governance tools, I have used Foucault's notion of governmentality, to make sense of the rationalities that folded formalization in Tshwane. The idea of permanency suggests that anyone can be the master of their own development in post-apartheid South African cities. This argument was demonstrated by my critique of the policy rationale of formalization which, as I discussed in Chapter 6, proposed policy shifts from the provision of RDP housing units to permanent stands/spaces. Permanency puts forth permanent spaces to foster the idea of enablement: meaning helping the poor help themselves (Hall & Pfeiffer 2000). A postcolonial criticism coming through Roy (2005) is that this 'celebration of self-help' makes it possible to devolve responsibility for poverty to the poor themselves, and in turn, obscures the role of the state and even renders it unnecessary. The fact that permanency discursively frames permanent spaces as subaltern spaces that are environmentally adequate and spatially just, whilst in fact, it [permanency] produces environmental injustice, is indicative that formalization falls for the postcolonial and southern theory critique of neoliberal governance. As argued by (Merry, 2001), in neoliberal governance, states endeavour to govern more while spending less, they have adopted mechanism that build on individual self-governance.

While such articulation brings to light how the hegemony of neoliberalism is continuously infiltrating into urban governance discourses, I am, however, more troubled by how those articulations perpetuate the demeaning of environmental unconsciousness narratives that relegate permanent dwellers as environmental delinquents. What this thesis has made evident is that such forms of neoliberal governance cause miscarriage of environmental justice. My analysis has made clear that formalization makes permanent dwellers carry the responsibility for their environmental conditions. A telling example, through Tshwane, demonstrated how environmental sacrifices are made by aspirant permanent dwellers to access permanent spaces. In fact, many of those interviewed gave reflections of their reasoning for subscribing to such environmental positions, revealing subtle discourses that socialized and coerced them to see permanent spaces as adequate living environments. In the end, this research brought into view- through permanency- how formalization dwarfs the demands for environmental justice.

- Letting them speak for themselves: procedural justice

Then what does environmental justice mean to a city like Tshwane? My discussion in Chapter 4 demonstrated how informal spaces are a product of the vile apartheid governance interventions, hence, questions about governance processes of apartheid and their legacy of misrecognition of the Black people remain central to discourses on justice and informality. For example, the spatial articulation of the informal settlements as a social problem became a means of framing injustice. As I have shown-through the cases of Phomolong and Jeffsville, very demeaning things are said about the

environmental character of informal spaces. The discussions in Chapter 6 demonstrated how, through permanency, permanent spaces were allocated to informal dwellers to fulfil formalization's promise of environmental justice. However, I argue that permanent stands reduce highly political tenure deprivation as a technocratic issue. This means the wholesale interventions through the permanent stands only addresses the material deprivation of justice, while neglecting to address the misrecognition of identities perpetuated by apartheid policies. What is evident is that at an intersection the ideas of sustainable city and formalization are not able to hold the promise of environmental justice and sustainable urban governance for the global South.

The methodological contribution of viewing formalization through permanency- similar to other works seeking to bring to surface indigenous knowledge- a move inspired by (Louis, 2007) view that embracing indigenous epistemologies is a critical element of indigenous methodological research. I say so because, it has opened a podium from which all relevant stakeholders can speak for themselves when talking about formalization. For instance, permanency allowed the people of Tshwane's informal settlements to use their own language-including their own metaphors- to explain their understanding of what living environments mean in formalization. This meant that I did not only rely on my 'insider position' (Turhan & Bernard, 2021) as both a local researcher and also of being the 'other' (Sharp, 2009). In this way, I was seeking to counter the 'epistemic violence' (Spivak, 1988), which has for long been committed when doing research on marginalized spaces, including informal settlements. Thus, introducing an alternative approach of explaining how environmental politics are contested, that may have not been adequately represented in mainstream research. Thus, permanency enabled me to slowly move the research baton towards decolonizing the ways of doing research on informality.

- [What permanency brings to research]

In sum, what this thesis has made apparent is that the idea of permanency has been a useful concept for tracing formalization, in two ways. First, deploying permanency in Tshwane, as a governance tool of technology has become an exemplar of how of power and politics, which operates through the permanent dweller identity. Various scholars, including Rose & Miller (2010), have already exhausted arguments on subject formation as a means to contesting power. However, looking at the role of permanent dweller identity in urban politics, I have come to agree with Véron (2016) that there is correlation between change in the conception of subjects and change in the conception of power and society. The permanent dweller identity was particularly useful to broaden the categories of political subjectivities who both suffer and benefit from the uneven production of urban nature (Heynen, 2014). As I have shown through chapters Six and Seven, following Tshwane's adoption of formalization as a housing policy objective, being the permanent dweller has become a mythical model for what the ideal informal dweller should represent. On the one hand, the City also communicates permanency as a creative and innovative approach to address housing and tenure deprivations. On the other, identifying as a permanent dweller has become an aspiration many informal dwellers seek to achieve. What this means is that the emergence of the permanent dweller identity, as a source of power, can change both urban and housing politics by redefining the terms of state-citizen engagement. Thus, deploying the localized conception of formalization-permanency in Tshwane has allowed me to see

that power is inherently topological, especially when looking at its influence in mobilizing local urban politics.

Secondly, understanding the governance ramifications-of formalization through permanency has also made methodological contributions. While permanency is held by both the city and the people - who are its beneficiaries and aspirants - as a decipher of apartheid tenure injustices, the emerging environmental politics¹⁸³ in the city show contrary power dynamics. Dominant literature has for long been condemning the informal citizen as an environmental delinquent and a source of environmental unjust spaces, giving impetus to critical writings on southern cities. However, analysing the formalization, in the radar of permanency, untangled the decision-making rationale of city officials and its dependency on informal practices. I demonstrated in Chapter Six how during implementation of formalization, city officials augment institutional¹⁸⁴ gap of formalization with informal modalities of governance. In consequence, raising questions about the city's governance practices as an accomplice in perpetuating environmental injustices. In the meantime, UPE scholars have, for instance, been very vocal encouraging us to focus on uneven processes inherent to the production of urban environments (Angelo & Wachsmuth, 2015), and power relations constituting those processes. Postcolonial studies and southern theory also remain focused on challenging such views, albeit from a more localised understating of power. What this work has also demonstrated [through Chapter Six] is that urban literature has omitted to highlight the implications of informal practices incorporated to augment the deficiencies of northern inspired urban governance interventions. This means that if we are serious about tracing how logics of governance-including formalization potentially contribute to environmental inequalities, we should not preclude to expose the limitations in their outlook and scope to serve southern cities. This has been another important limitation that this thesis has sought to demonstrate.

To conclude, permanency has brought to our attention that the adoption of formalization as an urban governance intervention was not simple implanting towards addressing apartheid environmental injustices. Instead, the adoption of formalization has introduced an assemblage of changing spatial and environmental discourses, as well as urban and housing politics. Furthermore, permanency has facilitated an epistemological shift that allowed me to see formalization in Tshwane beyond its current technocratic conception, as an ideology-free governance tool. In my opinion, working through permanency has allowed me to think about both the spatially of power.

- [What then should Tshwane do?]

Approaching formalization through permanency has been rather useful in revealing a gaping hole between the formalization and the sustainable city imaginary in Tshwane. It has revealed that the City of Tshwane's imaginary goal and politics of becoming a 'sustainable African city' are in divergence with

¹⁸³ *Tracing/observing the environmental politics in the Tshwane through permanent dwellers exposed the dumping of the environmental responsibility on the citizens. As my analysis of permanency in Phomolong and Jeffsville have shown, those with permanency are equally responsible for their environmental health as those in waiting.*

¹⁸⁴ *Institutions here referring to rules*

the environmental justice endeavours of formalization. Such conflict, in my opinion, is indicative of emerging power relations [politics] from contradicted urban governance logics.

The case of a sustainable City of Tshwane has revealed a blind spot in the sustainable city idea as a guide to set urban policy and a governance tool towards achieving an equally environmental justice city. For a city like Tshwane as well as other South African cities experiencing persisting informality and the associated land politics [see chapter 4] underpinning this unjust urban development moving in the right direction as far as sustainable development is concerned will require a refined understanding of the transformative nature of permanency. What is needed is for the city's sustainability approach to be more situated by being more context oriented, to propel it in tandem with its formalization goals. More importantly, this will entail that Tshwane deliberately strives to 'bring together sustainability, environmental justice and equity' (Agyeman et al., 2002) in its political, city planning and governance deliberations.

8.2 Lingering Research Questions

'Research is a never-ending journey'—unknown

The previous section demonstrated the newness of deploying permanency in Tshwane as a tool of analysis has unmasked alternative ways of doing research in southern cities. However, achieving such methodological and theoretical shifts should not deter us from accounting for the imperfections of such innovative research. I fully share the sentiments of Price & Murnan (2004) when they suggest that pointing to one's research limitations signals that the researcher has reflected on the validity of their study. It is, thus, from such a perspective that this section seeks to illuminate some of the imperfections of my study. Thus, as I come to the end of this particular research journey and writing these concluding remarks, I am still left with some unanswered questions. These questions are mainly instigated by, firstly, my reflections on the implications of centering my theoretical analysis around the nexus, given its shortcoming as an emerging theoretical framework for analysis. Whilst the nexus presented a theoretical grounding my frame of analysis, it is still in its primitive stage of development, safe to say it has presented some contradictions. Having said that, using analytic tools, such as UPE (Urban Political Ecology) and situated UPE, has been useful to ground the nexus. Nonetheless, these are also novel theories, with a limited insights on permanency. Second, proposing a new concept of permanency as a tool to generate theory for example, I used permanency to situate formalization. This has also proved challenging mainly because there is a dearth of existing literature from which to lay a foundation for my own study. My view is that, though informality has been a subject of research for a while, scholarly work on formalization has not yet matured.

The lingering research questions also stem from the fact that the formalization/sustainability conundrum continues to haunt the City of Tshwane. Talks about formalization remain abound in the City. The recently appointed Democratic Alliance, Tshwane mayor Randall Williams¹⁸⁵- the city's third mayor since I started the PhD almost five years ago- announced a new formalization plan. Box 4.3 communicated the formalization trajectory in Tshwane over the five year period. What this highlight is that there is a need for further research on spaces of informality and environmental injustice, considering that the city's sustainability aspiration are also in motion. My engagement with this research was instigated by a desire to transform the environmental urban governance perspective in relation to the sustainability of informal spaces. As I was walking this thesis journey, what become an even more urgent objective was to give space to the voices of the marginalized and misrecognized in the city's sustainability agenda. There is a need to create further awareness -to those in waiting, the beneficiaries of the permanent spaces and equally so to the city officials- of the implications of environmental injustice. But for such efforts to gain deserving attention, they need to be underpinned by further academic research.

especially considering the methodological challenges of working with the notion of permanency. Although permanency presented a situated opportunity to engage with the permanent dweller

¹⁸⁵ Councillor Randall Williams was appointed in 2020 following the untimely dismissal of the Stevens Mokgalapa as the City's DA elected mayor. Pointing to these political challenges clarifies the politicized nature of formalization in the City.

identity as a stakeholder in urban governance, and to understand how contestation of power can arise from urban governance. However, these subjects require analyses that can also reflect the entanglements of the city officials with power dynamics in processes of production of space. Wanting to capture such developments has contradicted the methodological capacity of the embedded case study I employed as the research design for this study.

As I close, in my opinion, placing the nexus as a topic of future research will also offer new possibilities for a better understanding of sustainability in African cities. Thus, such scholarly work can further enrich postcolonial studies and southern theory knowledge on sustainable urban governance. Situating formalization through permanency presents a beneficial research aspect to build on the work situated UPE scholars, such as Lawhon et al. (2014), have already initiated. There is, however, value to field research that can help a city in transition like Tshwane. Moreover, such future research can also benefit the broader UPE scholarship's contribution in policy discourses, especially when considering (P. A. Walker, 2006) criticism that the UPE has so far had little material impact on urban policies or socio-natures, more policy-relevant or 'political' in a practical sense. Thus, reflections on permanency present the Tshwane as a site for urban policy knowledge. As I indicated in the preceding chapters, formalization is a national housing policy objective in South Africa. Meaning that formalization of informal spaces is a policy concern that expands beyond the borders of the City of Tshwane. Thus, the generalizability of the results (Price & Murnan, 2004) on permanency can have valuable contributions given its policy implications. I argue, particularly, considering the influence narratives on misrecognition and environmental production- in relation to permanency- can have in directing future discourses on governance of subaltern spaces.

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APPENDIX 1: ONLINE PLATFORMS REGULARLY VISITED

City of Tshwane	www.Tshwane.gov.za
Government of South Africa	www.gov.za
NUSP	https://csp.treasury.gov.za/csp/DocumentsToolbox/002.SA.NUSP. Online%20Manual%20part%201-10.pdf
Sustainability week	https://sustainabilityweek.co.za
Twitter	÷

APPENDIX 2: ENVIRONMENTAL INCIDENTS

PHOMOLONG PIPE BURST, 2012

News Articles:

Eyewitness News	https://ewn.co.za/2012/08/20/Thousands-homeless-after-Mamelodi-pipe-burst
Independent Online	https://www.iol.co.za/news/south-africa/gauteng/anger-after-burst-pipe-kills-kids-1366813
News 24	https://www.news24.com/News24/100s-evacuated-after-pipe-bursts-20120820
Rekord	https://rekord.co.za/63771/burst-water-pipe-floods-phomolong/
Sowetan Live	https://www.sowetanlive.co.za/news/2012-08-27-victims-of-burst-water-pipe-under-attack/
Times Live	https://www.timeslive.co.za/news/south-africa/2012-08-20-800-evacuate-mamelodi-after-burst-pipe-floods-settlement/
IOL 25/10/2012	
SABC20/08/2012	
Pretoria	
News20/08/2012	
PretoriaNews	
11/08/2017	

Videos:

YouTube	https://www.youtube.com/watch?v=eUMou7UztQA https://www.youtube.com/watch?v=EuOL_AScOXM
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Websites:

Eyewitness News	https://ewn.co.za/2012/08/20/Thousands-homeless-after-Mamelodi-pipe-burst
Independent Online	https://www.iol.co.za/news/south-africa/gauteng/anger-after-burst-pipe-kills-kids-1366813
PressReader	https://www.pressreader.com

PHOMOLONG PIPE BURST, 2015

News Articles:

Rekord <https://rekord.co.za/63771/burst-water-pipe-floods-phomolong/>

JEFFSVILLE SINKHOLE, 2015

News Articles:

Daily Sun <https://www.dailysun.co.za/News/National/race-clash-over-shacks-20170129>

<https://www.dailysun.co.za/News/car-drops-into-hole-20191230>

Rekord <https://rekord.co.za>

<https://rekord.co.za/285978/families-of-jeffsville-to-be-relocated/>

PressReader <https://www.pressreader.com/south-africa/pretoria-news/20170208/281552290599387>

<https://www.pressreader.com/south-africa/pretoria-news/20130725/281659662656220>

Videos:

Rekord <https://www.youtube.com/watch?v=eUMou7UztQA>

YouTube <https://rekord.co.za/285989/chaos-erupts-in-bremmer-over-removal-of-squatters>

APPENDIX 3: LIVING CONDITIONS

WASTE ISSUES

News Articles:

eNCA <https://www.enca.com/south-africa/rubbish-bags-go-waste-mamelodi/>

PressReader <https://www.pressreader.com/south-africa/pretoria-news/20170523/282282435240601/>

Videos:

PressReader <https://www.pressreader.com/south-africa/pretoria-news/20170523/282282435240601/>

APPENDIX 4: LIST OF INTERVIEW PARTNERS

	Surname	First Name	Pseudo Name	Stakeholder Type	Affiliated informal Settlement/Department	Status/Position	Date of Interview
1	█	█	Pinklady*	Informal Dweller	Jeffsville	In Waiting	10/08/2018
2	█	█	City Official 2*	City Official	Housing Department	Policy, Planning	2018/08/16
3	█	█	Redshirt-Redcap	Informal Dweller	Phomolong	Permanent	2018/07/26
4	█	█	City Official 6*	City Official	Housing department	Implementation	2018/08/24
5	█	█	Mafifa*	Informal Dweller	Marikana	Permanent	2018/07/24
6	█	█	Maneat*	Informal Dweller	Phomolong	Permanent	2018/07/26
7	█	█	Mamtn*	Informal Dweller	Phomolong	In waiting	2018/08/27
8	█	█	Mamo*	Informal Dweller	Masholaville	In Waiting	2018/08/03
9	█	█	Oldie	Informal Dweller	Jeffsville	In waiting	2018/01/10
10	█	█	NaN*	Informal Dweller	Phomolong	Permanent	2018/07/27
11	█	█	Evi*	Informal Dweller	Masholaville	In Waiting	2018/08/03
12	█	█	Duck*	Informal Dweller	Masholaville	In Waiting	2018/08/03
13	█	█	Slayer*	Informal Dweller	Jeffsville	In Waiting	2018/08/03
14	Maja	Shadi Doris		Politician	Phomolong	Ward Councillor	2018/07/25
15	█	█	Oldie*	Informal Dweller	Jeffsville	In waiting	2018/08/10
16	Marele	Mercedes		Former City Official	Sustainability Unit	Sustainability Expert	2018/08/24
17	█	█	Manicehair*	Informal Dweller	Marikana	Permanent	2018/07/24
18	█	█	Makhi*	Informal Dweller	Phomolong	Permanent	2018/08/25
19	█	█	Youngman*	Informal Dweller	Phomolong	Permanent	2018/07/25
20	█	█	Mazett*	Informal Dweller	Phomolong	Permanent	2018/07/26
21	█	█	Makama*	Informal Dweller	Phomolong	Permanent	2018/08/26
22	█	█	Kat*	Informal Dweller	Jeffsville	In Waiting	2018/08/10
23	█	█	Madevu*	Informal Dweller	Phomolong	Permanent	2018/07/27
24	█	█	SA*	Informal Dweller	Jeffsville	In Waiting	2018/08/19
25	█	█	City Official 3*	City Official	Housing Department	Planning	16/08/2018
26	█	█	City Official 4*	City Official	Environmental Department	Environmental policy	28/08/2018
27	█	█	BraSA*	Informal Dweller	Spookpark	Permanent	2018/07/31
28	█	█	Prettylady*	Informal Dweller	Phomolong	Permanent	2018/07/26
29	█	█	City Official 1*	City Official	Housing Department	Housing Manager	2018/08/17
30	Sedibeng	Solomon		Politician	Jeffsville	Ward Councillor	2018/08/02
31	█	█	Babymom*	Informal Dweller	Phomolong	In waiting	2018/08/27
32	█	█	Poj*	Informal Dweller	Masholaville	In waiting	2018/08/03
33	█	█	Nto*	Informal Dweller	Masholaville	In waiting	2018/08/03
34	█	█	Slayer*	Informal Dweller	Jeffsville	In waiting	2018/08/10
35	█	█	Bassie*	Informal Dweller	Phomolong	Permanent	2018/07/25
36	█	█	Community Activist*	Informal Dweller	Phomolong	Permanent	2018/07/25
37	█	█	Lebo*	Informal Dweller	Phomolong	Permanent	2018/07/25
38	█	█	Machekers*	Informal Dweller	Marikana	Permanent	2018/07/24

39	████	████	Liz*	Informal Dweller	Phomolong	Permanent	2018/07/25
40	████	████	Cheese	Informal Dweller	Jeffsville	In Waiting	2018/08/10
41	████	████	Neighbour*	Informal Dweller	Phomolong	Permanent	2018/07/25
42	████	████	theMom*	Informal Dweller	Jeffsville	In Waiting	2018/08/10
43	████	████	theDaughter*	Informal Dweller	Jeffsville	In Waiting	2018/08/10
44	████	████	Moruti*	Informal Dweller	Phomolong	In waiting	2018/07/25
45	████	████	SisZ	Informal dweller	Spookpark	Permanent	2018/08/31

APPENDIX 5: UNIVERSITY OF PRETORIA RESEARCH ETHICS APPROVAL



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Research Ethics Committee

24 July 2018

Dear Ms Bendile

Project: Space, informality and inequality: Towards 'just' sustainability and governance for formal settlements in the city of Tshwane, South Africa
Researcher: NS Bendile
Supervisor: Prof I Pikirayi
Department: Anthropology and Archaeology
Reference number: 10115006 (GW20180222HS)

Thank you for your response to the Committee's correspondence of 31 May 2018.

I have pleasure in informing you that the Research Ethics Committee formally **approved** the above study at an *ad hoc* meeting held on 24 July 2018. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should your actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely

Prof Maxi Schoeman
Deputy Dean: Postgraduate and Research Ethics
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: pghumanities@up.ac.za

cc: Prof I Pikirayi (Supervisor)

Research Ethics Committee Members: Prof MME Schoeman (Deputy Dean); Prof KL Harris; Dr L Blokland; Dr K Booyens; Dr A-M de Beer; Ms A dos Santos; Dr R Fasselt; Ms KT Govinder; Dr E Johnson; Dr W Kelleher; Mr A Mohamed; Dr C Puttergill; Dr D Reyburn; Dr M Soer; Prof E Taljard; Prof V Thebe; Ms B Tuebe; Ms D Mokulapa

APPENDIX 6: TSHWANE RESEARCH PERMISSION LETTER



City Strategy and Organisational Performance

Room CSP23 | Ground Floor, West Wing, Block D | Tshwane House | 320 Madiba Street | Pretoria | 0002
PO Box 440 | Pretoria | 0001
Tel: 012 358 7542
Email: NosiphoH@tshwane.gov.za | www.tshwane.gov.za | www.facebook.com/CityOfTshwane

My ref: Research Permission/Bendile
Contact person: Pearl Maponya
Section/Unit: Knowledge Management

Tel: 012 358 4559
Email: PearlMap3@tshwane.gov.za
Date: 20 July 2018

Ms. Sheilla Bendile
P O Box 98162
Waterkloof Heights
Pretoria
South Africa
0065

Dear Ms Bendile,

RE: SPACE, INFORMALITY AND INEQUALITY: TOWARDS 'JUST' SUSTAINABILITY AND GOVERNANCE FOR INFORMAL URBAN SETTLEMENTS IN THE CITY OF TSHWANE, PRETORIA.

Permission is hereby granted to Ms Sheilla Bendile, a PhD in Development Studies candidate at in the Faculty of Humanities at the University of Pretoria, to conduct research in the City of Tshwane Metropolitan Municipality.

It is noted that the research aims to study how urban policy intervention, such as resettlements, aimed at attaining environmental justice, have come to create spatial transformations and simultaneously reproduce spatial injustices; and how they also suppress the agency of the informal dweller to the level of neither recognizing reproduction of those injustices nor their negative socio-spatial implications. The City of Tshwane further notes that all ethical aspects of the research will be covered within the provisions of University of Pretoria Research Ethics Policy. You will be required to sign a confidentiality agreement form with the City of Tshwane prior to conducting research.

Relevant information required for the purpose of the research project will be made available upon request. The City of Tshwane is not liable to cover the costs of the research. Upon completion of the research study, it would be appreciated that the findings in the form of a report and or presentation be shared with the City of Tshwane.

Yours faithfully,

PEARL MAPONYA (Ms.)
DIRECTOR, KNOWLEDGE MANAGEMENT SECTION

APPENDIX 7: CONSENT FORM



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

CONSENT FORM TO PARTICIPATE IN A RESEARCH STUDY

Title of Research Project: Space, Informality and Inequality: Towards 'just' sustainability and governance for informal urban settlements in the city of Tshwane, Pretoria.

Name of Researcher: Sheilla BENDILE

Student Number: 10115006

Introduction

- You are being requested to participate in a research study investigating spatial inequalities and environmental injustices prevailing in informal settlements in the city of Tshwane.
 - The purpose of the study is to understand: What beliefs and assumptions inform the city of Tshwane's housing department, post-1994, to relocate informal settlements, due to 'uninhabitable' land environments following sinkholes or flooding, yet they respond less to solid waste on habitable land environments?
 - You were selected as a potential participant because as a community member in the informal settlement and a beneficiary of the resettlement process you have first hand knowledge that can make a significant contribution to the subject matter.
 - Ultimately, the results of this study will be made available as a doctoral thesis, published in a scientific journal and also presented as a conference paper. The study may also be used to further academic research.
 - You are asked to carefully study the contents of this form and asked any questions before agreeing to participate in this study.
-

Study procedures

- Should you agree to participate in this study, you will be asked to partake in an audio-recorded interview.

Risks of being in this study

- Although all studies have some degree of risk, the potential in this study is quite minimal, as the interview will only seek your account on the resettlement process as it unfolded.
- You will not incur any costs as a result of your participation in this study.

Confidentiality and anonymity

University of Pretoria Tel: +27 (0)12 420 3111 www.up.ac.za
Private Bag X20
Hatfield
0028

APPENDIX 8: CHARTE ANTI-PLAGIAT



Charte anti-plagiat

Art 1 : Définition du plagiat

Le plagiat consiste à reproduire un texte, une partie d'un texte, une illustration ou des idées originales d'un auteur, sans lui en reconnaître la paternité par un référencement bibliographique ou iconographique adéquat (Cf. art. 3).

Art 2 : Objet des travaux universitaires

Sont considérés comme travaux universitaires tous les documents réalisés par les étudiants et les enseignants, les chercheurs et les enseignants-chercheurs dans le cadre des activités de formation et de recherche. Ces travaux universitaires doivent toujours avoir pour ambition de produire un savoir inédit et d'offrir une lecture critique, nouvelle et personnelle du sujet.

Art 3 : Méthodologie de référencement bibliographique

La méthodologie d'un travail universitaire implique que les emprunts (par exemple par copier/coller) soient clairement identifiés et que le nom de l'auteur et la source de l'extrait soient mentionnés.

Les citations textuelles y compris dans une traduction personnelle, doivent obligatoirement être placées entre guillemets et être accompagnées d'une référence bibliographique à la suite de la citation, ou en note de bas de page.

Les emprunts non textuels (tableaux, graphiques, photos, formules scientifiques, etc.) doivent également être accompagnés d'une référence bibliographique à leur suite ou en note de bas de page.

En complément, toutes les références des documents cités, empruntés ou adaptés, doivent figurer en bibliographie.

Art 4 : Détection du plagiat

L'Université Grenoble Alpes est dotée d'un outil permettant de contrôler systématiquement les travaux universitaires et de détecter les similitudes, dans le but de rechercher le plagiat.


Art 5 : Sanctions disciplinaires pour plagiat

Les auteurs présumés de plagiat seront traduits devant la section disciplinaire compétente qui pourra prendre des sanctions pouvant aller jusqu'à l'exclusion définitive de tout établissement d'enseignement supérieur. La procédure disciplinaire n'exclut pas d'éventuelles poursuites judiciaires.

Art. 6 : Engagement

Les étudiants et les personnels s'engagent à ne pas commettre de plagiat dans leurs travaux universitaires. À cette fin, ils reconnaissent avoir pris connaissance des obligations décrites dans les articles 2 et 3 de la présente charte et s'engagent à s'y conformer.

Je certifie, BENDILE Nomasono Sheilla (indiquer nom prénom)
avoir pris connaissance de la charte anti-plagiat et à la respecter.

Date et signature : 11 October 2021 

Appendix 9: Maps

A: Tshwane

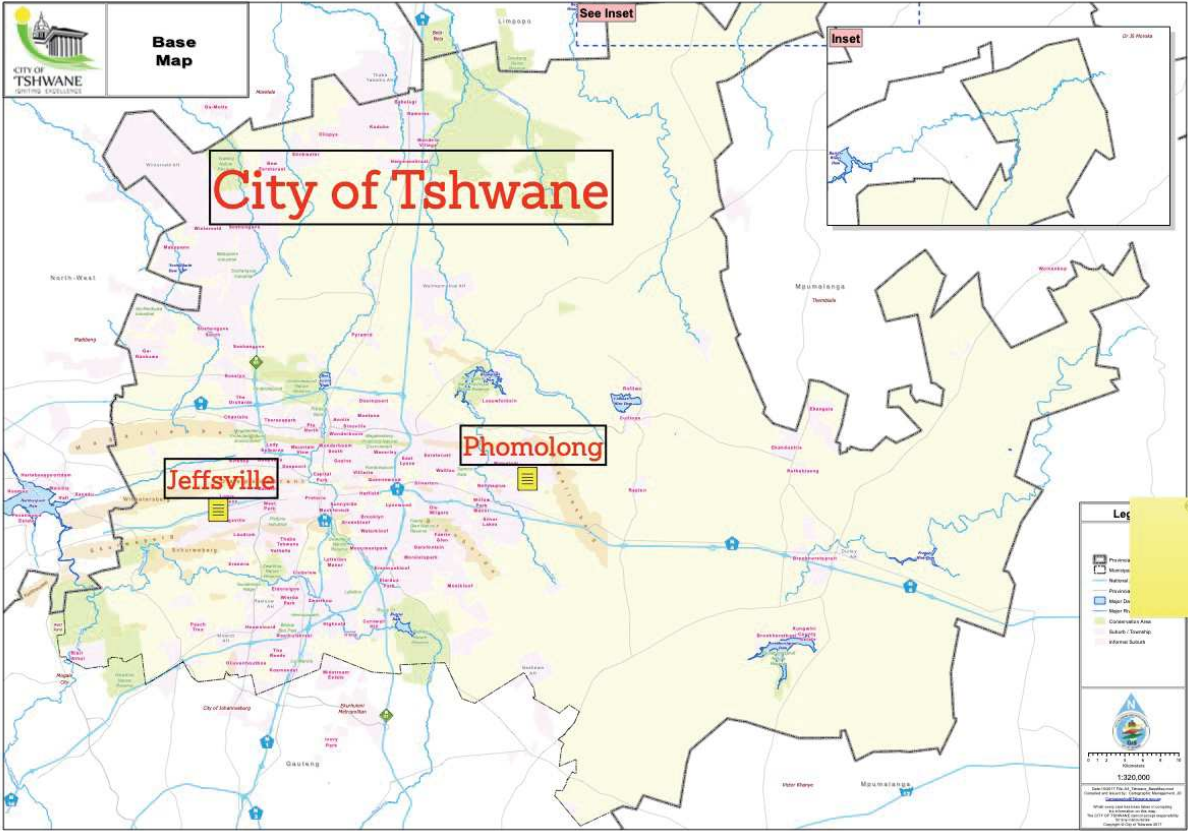
A1:

Source: City of Tshwane



A2:

Source: City of Tshwane



B: Phomolong

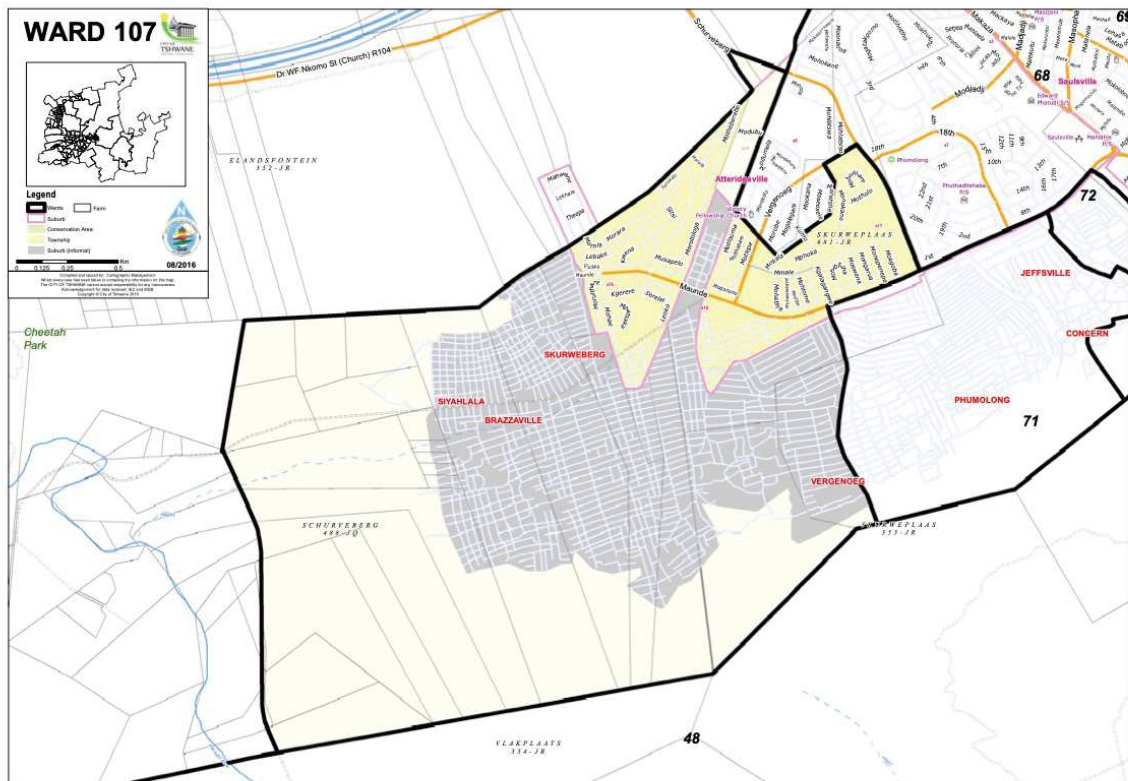
B1:

Source: GCRO



B2:

Source: City of Tshwane



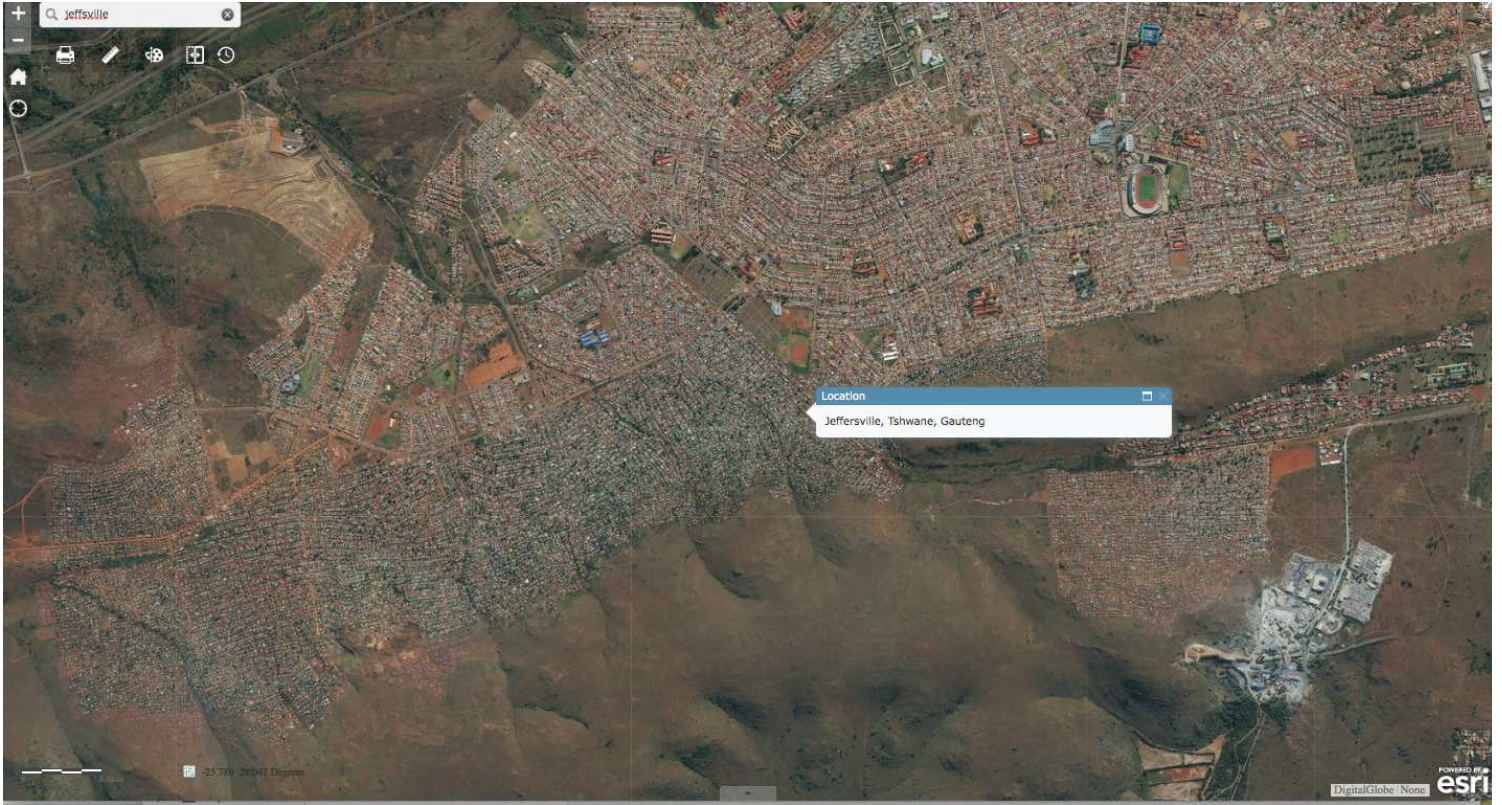
B3:

Source: Google Maps

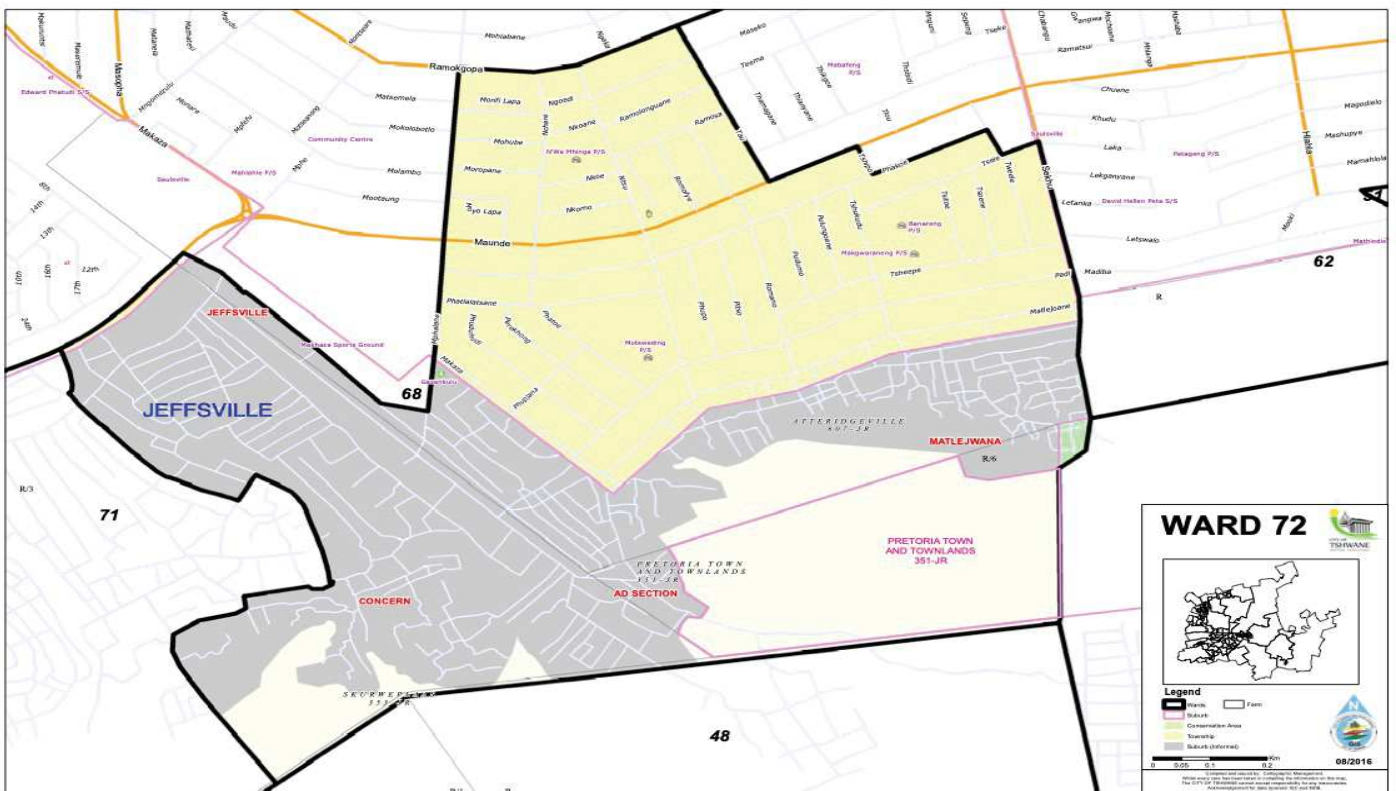


C: Jeffsville

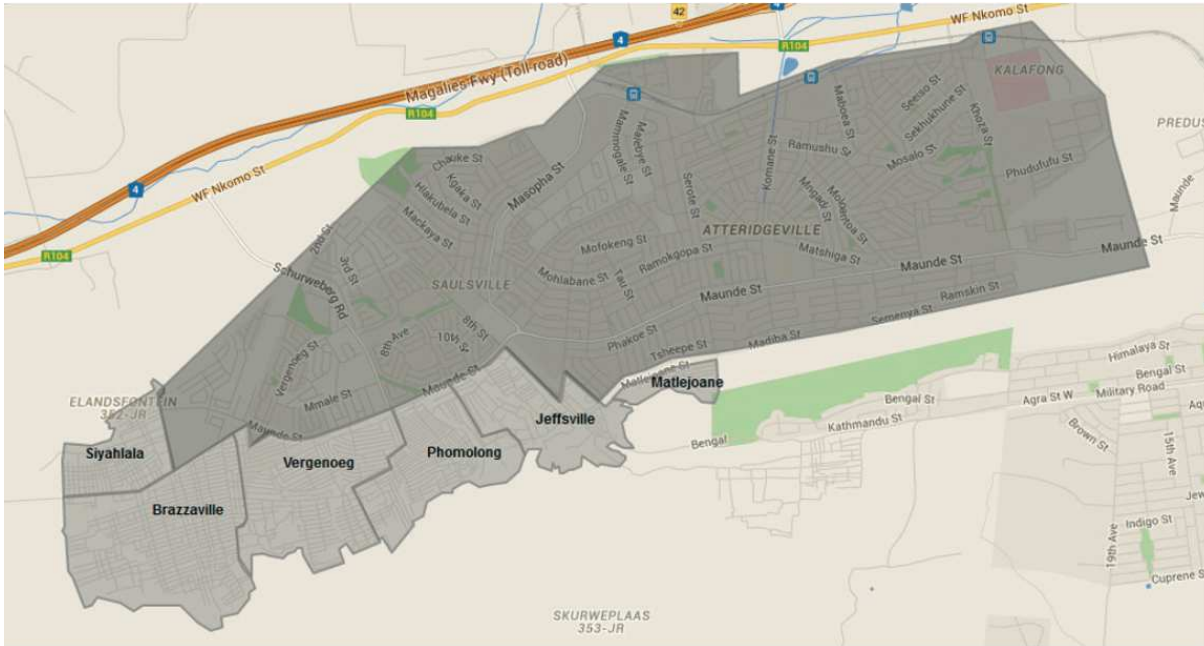
C1:
Source: GCRO



C2:
Source: City of Tshwane



C4:
Source:



APPENDIX 10: ABSTRACT

This study seeks to rethink the place of informal spaces in the sustainability and environmental governance discourses in South Africa through a critical and southern theory lens. There is no doubt that the urban sustainability paradigm has become a growing concern in urban governance. Various global environmental governance logics such as the Sustainable Development Goals (the SDGs), most notably the SDG11, have elevated the significance of informality in this urban sustainability agenda, with their calls for interventions to address the poor living environments facing informal settlements (UNHabitat). An interesting observation is that while urban informality has come to occupy a prominent position in urban sustainability narratives and governance, informality continues to be regarded as an antithesis of sustainability. The rise of formalization as a process of production of subaltern spaces in cities such as Tshwane, has put a spotlight on these politics of urban environmental governance. There have been some advances to question what (Myers, 2008) frames as a “disconnection between sustainable urban development and environmental justice in sub-Saharan African cities” (p:705). Some scholars, including Patel (2014), have also started to question the absence of environmental justice objectives in sustainability policies. Nevertheless, there remain a dearth of studies interrogating how the contradicting governance rationalities of urban sustainability and environmental justice intersect in local urban governance discourses in the global South. To fill this gap, I lean on Urban Political Ecology and southern theory to help analyze how such modes underpin the continued environmental injustices in informal spaces. To concretize this argument, I embark on analyzing an ‘embedded case study’ (Lin, 1993) of the formalization of informal settlements in the City of Tshwane. Through this case, I show that, although formalization emerged as a housing policy intervention claiming to address the environmental burdens of informal settlements, it nonetheless mainly frames informality as a tenure problem rather than an environmental concern. In consequence, the sustainability of informal spaces is further marginalized in discourses on sustainable urban governance. I use what I call ‘permanency’ as an analytic tool to explore the decision-making rationale [assumptions and beliefs] of urban governance stakeholders engaged with formalization in Tshwane’s informal settlements of Phomolong and Jeffsville. Through permanency I show that in the process of formalization, implicit power relations are reinforced, silencing the voices of the already environmentally marginalized subaltern in the reproduction of their living environments. This study, aiming to have policy-related implications, calls for re-imagining the governance of informal spaces, not only to address spatial restructuring but to create platforms for debate, giving those affected the voice and power in sustainability governance.