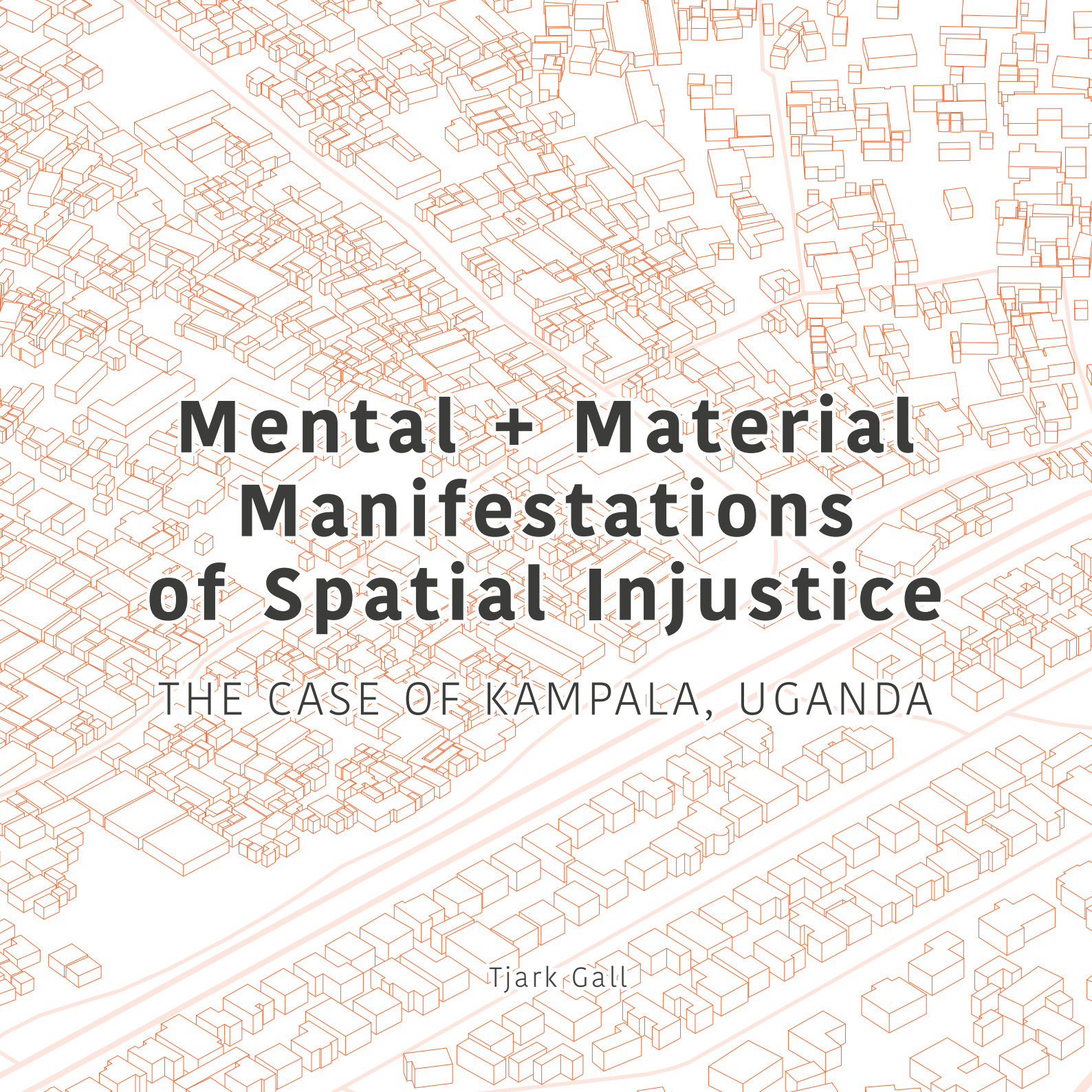

Mental + Material Manifestations of Spatial Injustice

THE CASE OF KAMPALA, UGANDA

Tjark Gall

Brunswick, Germany, March 2019

Thesis submitted to the Department Architecture of the Technical University Brunswick in partial fulfilment of the requirements for the degree of Master of Science in Architecture.

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Abbreviations

2SFCA	Two-step Floating Catchment Area Method
BRT	Bus Rapid Transport
DFID	Department for International Development, UK
EARF	East African Research Fund
GDP	Gross Domestic Product
GIS	Geographic Information System
GKMA	Greater Kampala Metropolitan Area
GTZ/GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Corporation for International Cooperation)
IHS	Institute for Housing and Development Studies, Erasmus University, Rotterdam
IPCC	Intergovernmental Panel on Climate Change
KCCA	Kampala Capital City Authority
LRT	Light Rail Transit
NRA	National Resistance Army
MoGLSD	Ministry of Gender, Labour and Social Development, Uganda
OSM	Open Street Map
PPI	Poverty Probability Index
SDG	Sustainable Development Goals
SSA	Sub-Saharan Africa
UGX	Ugandan Shilling
UN	United Nations
UN-Habitat	United Nations Human Settlements Programme
US	United States of America
USD	United States Dollar
VFCA	Variable-width Floating Catchment Area
WCED	World Commission on Environment and Development

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Fig. 1: Aerial Photo Kampala, showing former European neighbourhood Kololo, its golf course as a remnant of the previous green belt, and the adjacent 'Assudi Slum'

Acknowl-edgements

I would first like to thank my supervisors Prof Dr Tatjana Schneider of the Institute for History and Theory of Architecture and Cities and Prof Dr Vanessa Miriam Carlow of the Institute for Sustainable Urbanism of the Department Architecture at the Technical University Brunswick. Vanessa contributed significantly to my fascination for cities and their development since the second year of my Bachelors and continued to be a valuable mentor, discussant, and inspiration. Furthermore, I am grateful to Prof. Schneider who agreed to supervise my thesis even before starting her appointment as professor at the TU Brunswick and provided continuously valuable input during the preparation and writing of the thesis while giving me the freedom which I needed in the volatile process of this work.

Additionally, I would also like to thank the countless people who in some way or another provided inspiration, discussed the topic, and most importantly gave me an insight in the complex context of Kampala during my stay and many inquiries in the following months.

Finally, I must express my very profound gratitude to my parents, colleagues, friends and Mariana for providing me with unfailing support and continuous encouragement throughout my study and through the process of researching and writing this thesis. Thank you.

Tjark Gall

Injustice anywhere is a threat to justice everywhere.

– Martin Luther King, Jr., 1963, Letter from Birmingham Jail

1 Introduction

The global population is rising to unprecedented heights which, combined with the continuing urbanisation, leads to the majority of humanity residing in urban areas already today. While the population growth in many countries and cities in the Western world stagnates or even declines and create previously unknown challenges of ageing populations and spreading vacancy rates, population numbers in mainly Asia and Africa continue to increase. Additional to the ongoing natural growth, conflict-, climate change-, and poverty-driven rural-urban migration inside countries and across national borders further intensify the pressure on existing urban centres. While new urban settlers are often crucial for satisfying the growing demands in the job markets of evolving economies, they are accompanied by rapidly growing inequalities between urban residents around the world – with the most significant differences in the Global South. These differences range from access to services, facilities and the job markets, the lack of formal land tenure and recognition in the legal systems up to an insufficient sense of belonging, identity, and societal support structures, among many others. Throughout this work, some of the diverse origins, drivers, and counteracting strategies are discussed. While the same challenge exists in many places around the world, the focus is on urban agglomerations in sub-Saharan Africa (SSA) and more specifically on Kampala, the capital of Uganda. Particular attention is paid to the mental and material manifestations of spatial injustice – attempting to individually assess the consequences of urban inequalities between tangible and spatial materialisations and mental and psychological implications for the affected residents.

In the first chapter, a short introduction shall provide an overview of the broader global societal and development context, and simultaneously present the motivation and approach to the subject. In the second chapter, background information about justice, its variations and conceptualisations, as well as the context of the study, Kampala, are given. Afterwards, attempting to represent a part of the complexity, spatial injustice in general and in Kampala are looked at through four different lenses: Starting with the theoretical lens, an analysis of spatial justice literature, it shall provide the foundation of the following thoughts. Secondly, a his-

torical perspective follows which is specific to the context of Uganda and aims at partially dismantling the implications of societal developments, the colonial rule, and different planning approaches over the last century. This is followed by a spatial analysis, discussing patterns and structures which represent and affect the injustices between different groups of the urban population in one way or another. Many findings from the spatial dimension are based upon a preceding quantitative research[1] about social vulnerability and exposure to flooding risks – the most significant climate change risk in Kampala. Lastly, a 'human lens' follows, which looks at the influence of spatial injustice on the individual being and how different characters can be affected or perceive spatial and non-spatial inequalities. Without claiming to be comprehensive, these four lenses shall open up different scales and dimensions of spatial injustice which are discussed and brought back together in the following chapter. While spatial injustice is nothing which could potentially be solved by following a definite list of actions, the fifth chapter shows a variety of approaches and global ways to counteract it – ranging from spatial interventions of different scales to societal approaches, governance, and the role of the planner in the process. Finally, the resulting ideas, findings and lessons learnt follow to conclude the range of discussed issues, highlighting recommendations for policy-makers and practitioners as well as potential fields for further research.

1.1 Motivation

Injustices exist most likely since the beginning of time, with different individuals and groups having access to various resources based on their location, individual capacities, and much more. However, it seems that despite (or partly because of) ongoing economic and societal globalisation and increasing international cooperation, injustice is still on the rise. Regular news headlines containing information such as the top 1% of the

1 Master thesis written for the Master of Science at the Institute for Housing and Urban Development Studies (IHS), Erasmus University, Rotterdam, The Netherlands. The research was part of the EARF research project „Spatial Inequality in Time of Urban Transitions: Complex Land Markets", and included a 1 month field research funded by the Department for International Development (DFID) from the UK Government.

world constantly receiving over 20% of the global income, while the bottom half stays under 10% of the share,[2] highlight the significance of rising injustices. Additionally, the gross domestic product (GDP) per capita varies massively between countries and regions, with most countries in the Global South being left behind and experiencing comparatively little improvement. Despite the global injustices, a plethora of them manifests themselves at smaller scale in our urban agglomerations – the habitat of the majority of today's society and businesses of all kinds. In most cities, rich people with large buildings, properties, and access to high-quality services and facilities live – often in close proximity – with people lacking fundamental necessities for survival and continually being exposed to a threatened existence. While this challenge is neither new nor unknown to global organisations, there is still no sufficiently working approach which reverses this injustice or even merely slows it down. Therefore, I firmly believe that more attention and a better understanding is needed. While this work does not claim to solve injustice – something likely impossible due to human nature itself – it shall shed some more light on it, invigorate new perspectives and discuss the multiplicity and complexity thereof.

1.2 Objective + Research Question

To improve the understanding of spatial injustice in the context of SSA, a series of research objectives and a central research question are developed, which are the underlying structural constitutes of the following chapters.

1.2.1 Objective

The central objective of this thesis is the development of a combination and compilation of different elements of the spatial injustice discourse to allow for a better understanding in the urban context in sub-Saharan Africa. It shall neither create a primarily theoretical work nor an assembly of specific contextualised issues and approaches but instead span a range of perspectives and lenses through which spatial injustice can be

2 World Inequality Lab, 2018. World Inequality Report 2018: Executive Summary. Available at: https://wir2018.wid.world [Accessed 04 January 2019].

looked at with the objective to, on the one hand, provide an overview for the reader over concepts, context, and practical approaches as a starting point for in-depth analyses into particular fields, while it shall, on the other hand, be sufficiently comprehensive to assist practitioners through theoretical and practical input towards a more thorough consideration of spatial injustice and its manifestations. This thesis attempts to achieve this by building a theoretical foundation of terms and concepts in order to contribute to the challenge of dismantling spatial injustice and furthermore, partly separately and partly combined, look at theoretical, historical, spatial, and human elements to understand the impacting factors of spatial injustice and its mental and material manifestations in Uganda. The context of Kampala provides on the one side a case study to discuss certain elements in more detail, while it simultaneously shall act as a representative environment which shares plenty of commonalities with other cities in the global South and sub-Saharan Africa in particular.

Furthermore, spatial and non-spatial interventions and actions which can potentially counteract the current development of maintaining, reinforcing and further manifesting spatial injustices, are used to provide examples and inspirations. However, those shall neither be seen as a simple guideline to diminish injustices nor does this work claim comprehensiveness or the development of replicable approaches. Instead, the combination of different aspects, scales, and fields shall lead towards a mutual starting point which can contribute to reducing inequalities by attempting to provoke new perspectives for the reader.

1.2.2 Research Question

The proposed research for Uganda seeks to fulfil this objective through the following research question: How can the manifestation of spatial injustice in mental and material dimensions in urban agglomeration in sub-Saharan Africa be better understood? The answer to this primary question shall further be examined by looking at how spatial injustice can be conceptualised in the context of cities in sub-Saharan Africa and what effects it has on livelihoods, and how the access and right to the city and quality thereof vary and can result in spatial injustice. Addition-

ally, historical and geographical drivers and incubators of spatial injustice are looked at, as well as how spatial, and non-spatial urban constituents strengthen or attenuate the situation of urban residents. Finally, the question is which interventions and actions could potentially be considered to counteract spatial injustice and result in a more just city for everyone.

1.3 Framework

Access to land, services, employment opportunities and therefore also the city itself varies strongly between different income and social groups. Mostly in countries in sub-Saharan Africa, these gaps are significant and disadvantage the more vulnerable groups even more, specifically under the threat of climate change and its consequences. The understanding thereof as well as realising which factors positively or negatively influence spatial justice is crucial in tackling these inequalities. These challenges are not sufficiently researched in Uganda yet and become even more pressing through fast urbanising rates and rapid urban transformations. In order to approach the research question, an underlying conceptualisation of spatial injustice is developed, which attempts to uncover some of the principal drivers of spatial injustice, divides between the material and mental manifestation thereof, highlights different scales in which spatial injustice can be studied, as well as lenses which constitute the structure of the third chapter. A variety of concepts and approaches is combined to help the development of a better understanding of the complexity of injustices in the urban realm.

1.4 Significance of the study

While a previously written thesis quantified and visualised the distribution of socio-spatial characteristics in the context of climate change-related risks in Kampala, it simultaneously highlighted the necessity to delve deeper into the qualitative and more theoretical dimensions of the topic. Better integration of the theoretical base shall help to contribute to the understanding of developments over time and its implications for the affected population, while the combination with historical events and a more individualistic perspective on different societal groups shall lead to

different viewpoints as a basis for counteracting the prevailing injustices. Despite the increasing global academic consideration of the topic and the already quite broad existing theoretical foundation, there seems to be a gap in academic literature which attempts to span the range between theoretical studies of human nature, spatial manifestations in the context of sub-Saharan Africa, and its connections and bidirectional leverage. This thesis does not claim to close this gap, however, hopes to create a basis for academics as well as practitioners who are working in this context and look for a starting point which links and combines very different, but strongly intertwined elements of spatial injustice.

1.5 Scope and limitations

The geographical scope is mainly the official administrative city of Kampala, while also considering areas of the functional entity of the metropolitan area of Kampala. Content-wise, the thesis shall, opposing to the prior research, not attempt to quantify or measure elements of spatial injustice but explore some of the reasons for the current situation as well as looking for possible approaches to reduce the injustice. However, several aspects limit this work, including the inability to collect again primary data on-site. Therefore, the underlying information is limited to the already available information, supported by qualitative secondary data, interviews and enumerations which can be carried out from afar. Furthermore, spatial injustice – depending on its conceptualisation – spans nearly every scale and sector of urban systems. This complexity, on the one hand, makes it impossible to create a comprehensive work, and the objective can merely be to touch on some of the many elements.

On the other hand, injustice and the perception thereof is, or can be, deeply personal and individualistic and may vary for everyone. Therefore, a full understanding is further made impossible. As a partial attempt to reduce the limiting effect of this, a section of the third chapter incorporates different fictional characters and their particular mental manifestations of spatial injustice – trying to cover some of this variations. Furthermore, the time, scope and resources of this work do not allow to look at all issues in the level of detail as wished for. It is, however, hoped

that it still results in a product which provides new insights, opens up exciting niches for further in-depth studies, and at the same time can be extended over time when time and resources allow. Another, more generic limitation is the predominant origin of most theoretical discourse on justice and urban studies originating from the Western and industrialised world. While global academic contributions grew significantly in the past decades, mostly in more theoretical discussions it still proves to be impossible to base the more theoretical parts on literature which equally comes from different geographical contexts. And even most academic works from the Global South are heavily influenced by the same authors due to the historic and ongoing Western influence on the educational systems through missionary work, colonialism, and lastly development aid; as well as the distribution of, e.g., research funds, conferences, or journals. Due to these reasons, many Western scholars are referenced in this thesis. While some concepts can be assumed to be relevant for human societies despite their locations, in other cases, it needs to be kept in mind and is undoubtedly a limitation which elimination could lead to a more detailed as well as differentiated understanding.

Lastly, and most crucially, there are many limiting aspects which are unavoidable but simultaneously crucial. Despite having spent a significant period in Kampala itself and comparable environments, my ability to sufficiently comprehend both material and mental aspects of spatial injustice in the studied context is highly restricted by my uprising in a globally privileged condition – by being white, male, European/German, middle-class, and able to study, travel, and explore the world while never worrying about life-threatening issues. Furthermore, while writing about flood risks, feelings of lacking safety, informality, missing agency and political or societal acknowledgement, I have never experienced any of these in a significant manner. Therefore, while I am attempting to produce perspectives as authentic and unbiased as possible and to the best of my knowledge and experience, I can never reach the theoretically required depth of understanding of spatial injustice. However, I sincerely hope that it neither falsely represents nor discredit anyone and that it can still contribute to the broader injustice discourse.

1.6 Conceptual approach

To introduce the following sections and some of the reappearing terms and elements, a framework for the conceptual approach (fig. 2) of this thesis is developed. It is structured in four elements – some of the primary drivers of spatial injustice, and spatial injustice itself and the material and mental manifestations which are interwoven, are the central element of this thesis. Furthermore, four different scales show the range of occurrence of spatial injustice and shall in the course of the work highlight some of the issues at different scales. Further, the four different lenses – theoretic, historical, spatial, and human – are used as a conceptual structure for the third chapter to analyse different constituents without attempting to divide them into separate pillars. Lastly, it is important to mention that this structure is not supposed to act as a conceptual framework in the traditional sense which is developed based on the literature review, but instead shall provide an overview of what will be discussed, what is seen as crucial, what is included and excluded, and how the following chapters are structured.

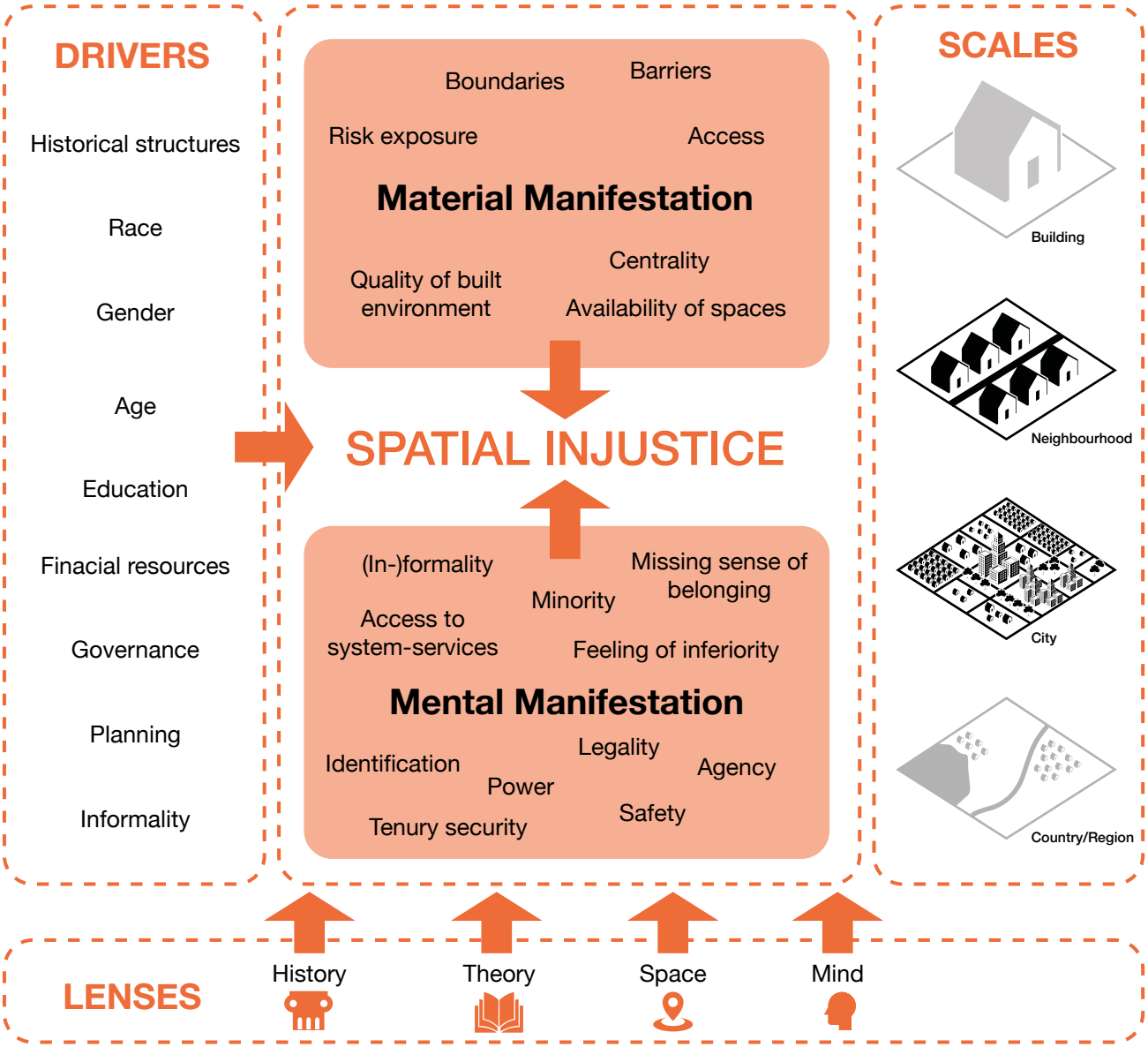

Fig. 2: Conceptual approach

Author 2019

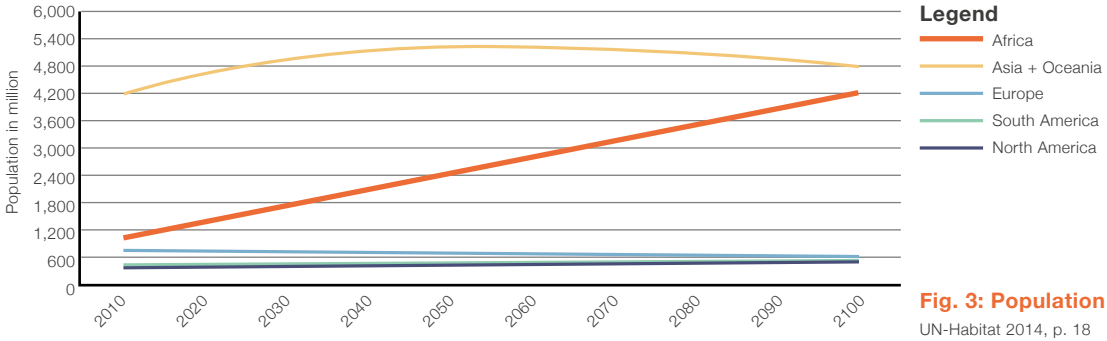

Fig. 3: Population by region 2010-2100

UN-Habitat 2014, p. 18

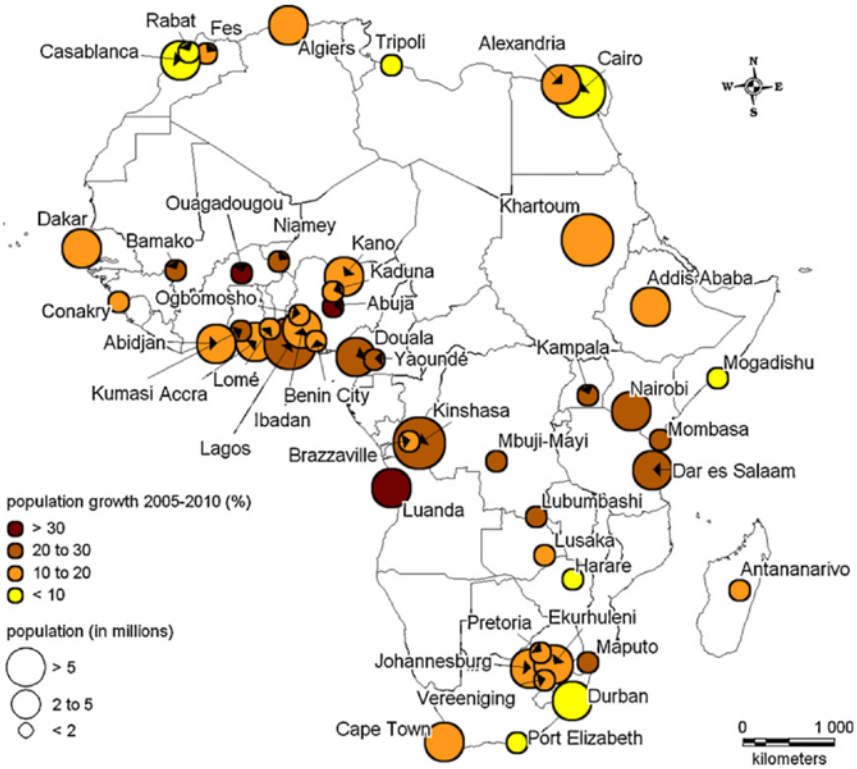

Fig. 4: Urban population growth in Africa 2005-2010

Karolien et al. 2012, p. 200

2 Background

The global population continues to increase rapidly and is mostly concentrated in the urban areas of the Global South. More specifically, the African continent is experiencing the highest population rise in the present century, while the populations of Europe, and South and North America remaining mostly stable and Asia's and Oceania's population growth slowing down and are expected to reach a peak in the mid of the century (Fig. 3). On the African continent, several mega-cities already exist with populations exceeding five million, i.e. Lagos (Nigeria), Cairo (Egypt), Kinshasa (Democratic Republic of Congo), Luanda (Angola), and Mogadishu (Somalia), and several more expected to cross the 5-million-mark in the next decade. While Kampala, the focus of this study, is relatively small with less than 2 million people currently residing inside the administrative boundaries, it is still experiencing one of the fastest growth rates (fig. 4). Simultaneously, Kampala is the only major city in the region despite Nairobi and has significant importance as a major economic centre. And compared to some of the bigger cities in eastern Africa, such as Nairobi, Addis Ababa, or Dar es Salaam, it is comparatively less studied, which combined was part of the reason to chose it as the case study.

Furthermore, climate change plays an increasingly important role in urban development, again significantly in Kampala through the proximity to Lake Victoria and the overall geographical conditions. In a broader perspective, urban agglomerations became the centre of the current development and sustainability debates. Their importance is widely acknowledged and continuously highlighted by international and national institutions around the world and represent a central aspect in the Sustainable Development Goals (SDGs) of the United Nations. Most importantly, SDG 11 focuses on making "cities and human settlements inclusive, safe, resilient and sustainable" while the city itself functions as the arena for achieving nearly all the other goals.[3]

The questions arise, what this development will mean for the population within cities and how it can be managed and steered into a sustainable

3 United Nations, 2015. Draft outcome document of the United Nations summit for the adoption of the post-2015 development agenda, p. 14.

direction. One of the first reports often associated to sustainability – 'Our common future'[4] – already highlighted these issues as well as spatial injustices in 1987, together with the necessity to identify the most vulnerable groups and tackle the social and environmental risks which accompany the population surge. However, more than three decades went by, and even if sustainability is a primary concern nowadays, more people than ever before are living in risk-prone circumstances, and environmental depletion does not slow down either.[5] Figure 5 shows for example that 86 of the 100 fastest growing cities are on the African continent, with at least 79 of them facing "extreme risks" according to the climate change vulnerability index.

With urban areas as the primary habitat of the world's population, this fast urbanisation patterns increase the demographic pressure, while climate change stresses the cities, and their adaptation is challenging due to the responsible institutions often lacking resources and capacity to tackle the rising complexity and quantity of issues.[6] In 'Africa's Urban Revolution', the urban researchers Susan Parnell and Edgar Pieterse emphasise the general growth which occurs in both urban and rural areas but its strong concentration in urban agglomerations. This development is not only about the increase of the number of residents but comes along with "severe overcrowding, lack of sanitation, constant

4 WCED, 1987. Report of the World Commission on Environment and Development: Our Common Future. Available at: http://www.un-documents.net/our-common-future.pdf [Accessed 10 September 2018].

5 Adger, W. N., 2006. Vulnerability. Global Environmental Change, 16, pp. 268-281. Available at: https://doi.org/10.1016/j.gloenvcha.2006.02.006 [Accessed 10 September 2018].; Brecht, H., Deichmann, U. and Wan, H. G., 2013. A Global Urban Risk Index. World Bank: Policy Research Working Paper 6506. Available at: http://documents.worldbank.org/curated/en/804651468331205546/A-global-urban-risk-index [Accessed 10 September 2018]; UN-Habitat, 2014. The State of African Cities 2014: Re-imagining sustainable urban transitions. Available at: https://unhabitat.org/books/state-of-african-cities-2014-re-imagining-sustainable-urban-transitions/ [Accessed 10 September 2018]; and United Nations, 2015. Draft outcome document of the United Nations summit for the adoption of the post-2015 development agenda & United Nations, 2016. Habitat III, New Urban Agenda. Available at: http://habitat3.org/the-new-urban-agenda/ [Accessed 10 September 2018].

6 Pieterse, E. and Parnell, S., 2010. Africa's urban revolution in context. In: Parnell, S. and Pieterse, E. eds., 2014. Africa's Urban Revolution. London: Zed Books, pp. 1-17; Myers, G., 2016. Urban Environments in Africa: A critical analysis of environmental politics. Bristol: Policy Press.

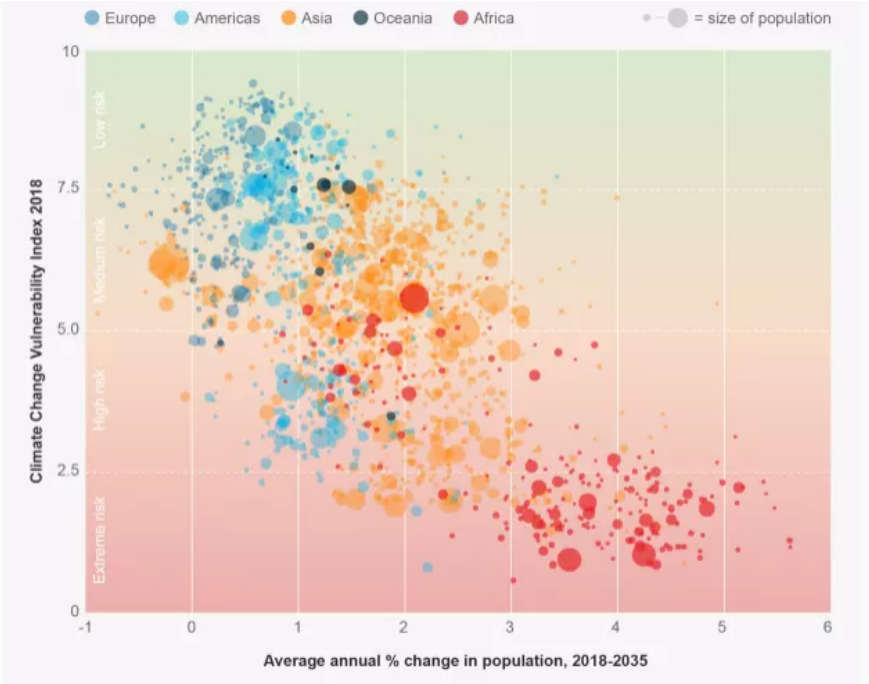

Fig. 5: Rapidly growing African cities most vulnerable of climate change

Verisk Maplecroft 2018 based on UN data from 2018

threat of bodily harm and abuse" and is "linked to the structural poverty and systemic exclusion experienced by a large proportion of the urban population in most African cities". Unequally distributed pressures on age, income and gender groups further result in negative externalities on health, productivity and economic behaviour.[7] Additionally, climate change and global environmental change are leading to even more rural-urban and transnational migration of climate refugees, unequal distribution of land, hazard risks for settlements in the shape of floods, landslides, droughts or heat waves, to just name a few which highlight the "dynamic processes and the interplay" of these elements.[8]

7 Pieterse and Parnell 2010. Africa's urban revolution in context; Bartlett, S., 2008. Climate change and urban children: impacts and implications for adaptation in low- and middle-income countries. Environment and Urbanization, 20 (2), pp. 501-519. Available at: http://journals.sagepub.com/doi/abs/10.1177/0956247808096125 [Accessed 10 September 2018]; Fainstein, S., 2010. The Just City. Ornell University Press Ithaca and London.

8 Parnell, S. and Walawage, R., 2010. Sub-Saharan African urbanisation and global environmental change.

However, injustice does not only exist amongst different social groups within the cities but also on global scale. Climate change itself is a global challenge, mainly induced by the industrialised countries while the most impoverished countries contributed the least but suffer the most from its consequences.[9] The suffering is further intensified due to a widespread lack of adaptive capacity, defined as the "potential, capability, or ability of a system to adapt to climate change stimuli or their effects or impacts".[10]

Parnell and urban geographer Walawage[11] further expand on the importance in these complex circumstances of creating the capacity to ensure urban resilience so that the livelihood of everyone in the city is not negatively affected by the broader global demographic and environmental processes. All these issues emphasise the plethora of challenges which cities in SSA are facing. Tackling them will be one of the critical tasks for policy makers and planners in the coming decades. Starting with the predominant injustice and its spatiality in urban agglomerations, this research shall contribute to the understanding thereof by looking at its drivers and social consequences, as well as the interrelation between urban form and social vulnerability, while showing context-adapted spatial and non-spatial approaches to attempt counteracting this development.

One critical factor of spatial injustice is the spatial dimension of the built environment of the city – the urban form – defined by Williams as "the physical characteristics that make up built-up areas, including the shape, size, density and configuration of settlements."[12] Urban form is moving towards the centre of interest in the sustainability debate, while its impor-

9 Althor, G., Watson, J. E. M. and Fuller, R. A., 2016. Global mismatch between greenhouse gas emissions and the burden of climate change. Scientific Reports, 6. Available at: https://www.nature.com/articles/srep20281 [Accessed 10 April 2018].

10 IPCC, 2001. Climate Change 2001: Impacts, Adaptation, and Vulnerability. Intergovernmental Panel on Climate Change. Available at: http://www.ipcc.ch/ipccreports/tar/wg2/pdf/WGII_TAR_full_report.pdf [Accessed 10 September 2018].

11 2010. Sub-Saharan African urbanisation and global environmental change.

12 Williams, K., 2014. Urban form and infrastructure: a morphological review. UK Government, Office for Science, p. 6. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_ data/file/324161/14-808-urban-form-and-infrastructure-1.pdf [Accessed 10 September 2018].

tance on the social and ecological risk exposure is further emphasised.[13] Myers adds to the definition of urban form, in his words *cityshape*, that in the context of SSA it is the physical as well as the "socially and culturally produced environment"[14], highlighting non-spatial characteristics.

Urban activist and author Jane Jacobs described the strong interrelation between the built environment and social dynamics of cities in the American context already in 1967 in her book 'The death and life of great American cities',[15] where she states that cities should be a place for people, even if that is often not the case (anymore), but instead an environment aiming at achieving the highest economic prosperity for the private sector. Jacobs further described the positive impact of being socially better interconnected on adaptive capacity, also supporting the interrelation between the spatial and social dynamics of cities.

Building upon Jacobs' perspective, Danish architect and urban designer Jan Gehl[16] embraces the interconnection of urban form and social life, sustainability and health through variables of density, compactness, and diversity while also highlighting its relation to risk (e.g., traffic accidents, robbery). Additionally, he argues that high-quality urban spaces can fuel interaction and social inclusion, and therefore a higher sense of community which again can lead to better cooperation and assistance in case

13 Jabareen, Y. R., 2006. Sustainable Urban Forms: Their Typologies, Models, and Concepts. Journal of Planning Education and Research, 26, pp. 38-52. Available at: http://jpe.sagepub.com/content/26/1/38 [Accessed 10 September 2018]; Hillier, B., 2009. Spatial Sustainability in Cities: Organic Patterns and Sustainable Forms. Proceedings of the 7th International Space Syntax Symposium. Stockholm: KTH. Available at: https://pdfs.semanticscholar.org/7853/fc9e16bf904178ae143e559d25aa6f66ec48.pdf [Accessed 10 September 2018]; Louf, R. and Barthelemy, M., 2014. Scaling: Lost in Smog. Environment and Planning B: Planning and Design, 41, pp. 767-769. Available at: http://journals.sagepub.com/doi/abs/10.1068/b4105c [Accessed 10 September 2018]; Fragkias, M., Lobo, J., Strumsky, D. and Seto, K. C., 2013. Does Size Matter? Scaling of CO2 Emissions and U.S. Urban Areas. PloS One, 8 (6), pp. 1-8. Available at: https://doi.org/10.1371/journal.pone.0064727 [Accessed 10 September 2018]; Oliveira, E. A., Andrade, J. S. and Makse, H. A., 2014. Large cities are less green. Scientific Reports, 4, pp. 1-12. Available at: https://www.nature.com/articles/srep04235 [Accessed 10 September 2018]; Pelling, M. and Wisner, B. eds., 2009. Disaster Risk Reduction: Cases from Urban Africa. Abingdon: Taylor & Francis.

14 Myers, G., 2016. Urban Environments in Africa. p. 19.

15 Jacobs, J., 1961. The Death and Life of Great American Cities. New York: Vintage Books.

16 Gehl, J., 2010. Cities for People. Washington: Island Press.

of disaster regardless of their type or scale. He also states the importance of shared urban space since overpopulation, and rising poverty put enormous pressure on the livelihood of people.[17]

On the other hand, justice itself in cities was famously raised into focus by Susan Fainstein in 'Just Cities'. She provided a broad overview of different notions of justice, how it can be conceptualised and quantified and also states that injustice rises and the poor, mostly women and children, represent the most vulnerable groups[18] – which is discussed further in the following sub-chapters. Furthermore, the link between poverty and vulnerability in the field of environmental risks was intensively studied by UN-Habitat,[19] naming the lack of decision-making power and resources, mostly in times of disasters, as the primary reasons, also emphasising the disproportionate distribution of risk exposure among different age and gender groups.[20]

To gain a better conceptualisation of risk and vulnerability in the urban context, sustainability researcher Brooks[21] generally distinguishes between social and biophysical vulnerability. Social vulnerability includes everything related to the human and is the focus of this research, while biophysical vulnerability focuses mainly on the ecosystem and biophysical environment. Risk, on the other hand, is usually composed of different types of hazards/dangers, their occurrence and scale. Another two constituting aspects are adaptive capacity as the "potential, capability, or ability of a system to adapt to climate stimuli or their effects or impacts"[22] and sensitivity as "how affected a system is after being exposed to the

17 Gehl, J., 2010. Cities for People.
18 Fainstein, S., 2010. The Just City.
19 UN-Habitat, 2014. The State of African Cities.
20 see Bartlett, S., 2008. Climate change and urban children.
21 Brooks, N., 2003. Vulnerability, risk and adaptation: A conceptual framework. Tyndall Centre for Climate Change Research: Working Paper 38. Available at: https://www.researchgate.net/publication/200032746_Vulnerability_Risk_and_Adaptation_A_Conceptual_Framework [Accessed 10 September 2018].
22 IPCC, 2001. Climate Change 2001, p. 881.

stress."[23] While these terms are just parts of the studied field, they will appear regularly and are essential constituents.

Spatial injustice itself generally refers to factors that define the connection between space and social justice, which influences the organisation of space in human societies. Spatial planning impacts the cultural dimension of cities and consequently affects human relations in various ways. These factors are based on, among others, the participation of different groups in decision-making processes at all levels of the society and often lead to conflicts of interest among the affected groups. Spatial injustice includes geographical differences of access, locations in the urban fabric, capabilities, rights, and many others which will be further detailed below. Injustice can materialise in diverse ways, such as different urban patterns, access to facilities and basic services, as well as the quality of the direct built environment and infrastructure. Similarly, non-spatial, mental injustices can occur in a variety of ways, from more tangible issues like formal rights or land tenure security to less tangible ones such as feelings of exclusion or a lacking sense of belonging or community; and can widely vary even within a community.

A typical example for this manifestation in Kampala are the high walls and fences which limit the accessibility to people, with many buildings having security guards or checkpoints at the points of entry, defining who can enter and who cannot. The selection criterion does, on the one hand, limit who can access certain spaces, resources, and facilities, while also leading to mental barriers by determining who can belong to a particular societal group and is 'welcome' to parts of the city. Those who are allowed to enter a certain place can develop a sense of belonging while those that are denied access are left out of a particular social entity. People that are denied the access can develop a mental conception that they are not welcome – possibly to an otherwise 'public' and open

23 Engle, N. L., 2011. Adaptive capacity and its assessment. Global Environmental Change, 21, pp. 649. Available at: https://doi.org/10.1016/j.gloenvcha.2011.01.019 [Accessed 10 September 2018]; compare to Adger, W. N., 2006. Vulnerability. Global Environmental Change, 16, pp. 268-281. Available at: https://doi.org/10.1016/j.gloenvcha.2006.02.006 [Accessed 10 September 2018] and IPCC, 2001. Climate Change 2001.

space – which subsequently divides the users of spaces into separated groups based on unjust criteria and leads to exclusionary spaces. In order to further look at the aspect of belonging and access to space, and to introduce different elements of spatial injustice, a more in-depth look at the spatial and societal structure of Kampala is undertaken in the following chapter.

While the sections above attempted to provide an overview of some of the main terms and concepts, as well as their interrelation and importance for this thesis' topic, the focus in the following sub-chapter is mainly on the introduction of the case of Kampala, followed by more detailed discussions of justice, space, and some of the most relevant theory and concepts.

The selected case of Kampala provides, as mentioned above, a compelling case due to its fast urbanisation and current as well as predicted spatial expansion but early development stage in comparison to other

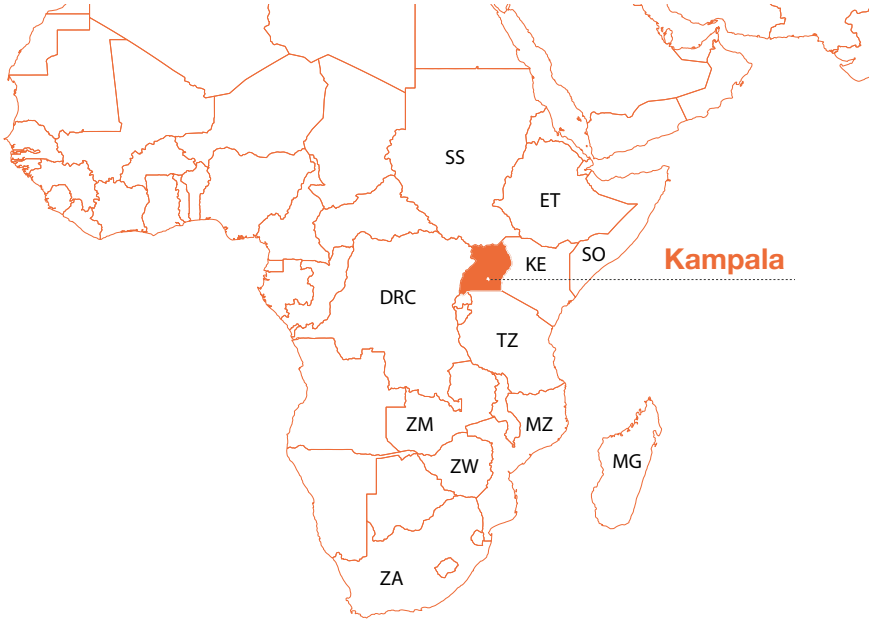

Fig. 6: Location of Kampala, Uganda
Author, 2019

Eastern African cities.[24] At the same time, it experiences severe climate change-related consequences, and has high levels of informality, low levels of land tenure security and building regulations, basic service provision and faces institutional challenges which further complicate the situation[25] – leading to various kinds of spatial injustice. Therefore, it is an interesting case study to analyse itself while its comparability to many other cities in SSA provides the opportunity to transfer and apply simliar approaches in different geographical contexts.

2.1 Context of Kampala

The focus of this research is on Kampala, the capital of Uganda, which is located in the southern region, adjacent to Lake Victoria, the largest lake in Africa, source of the Nile and shared between Kenya, Tanzania, and Uganda (fig. 6) and impacts the city's development in various ways. While Uganda itself is still one of the less urbanised countries in eastern Africa (2011: 31.2%),[26] the urbanisation rate is significantly higher compared to other countries in sub-Saharan Africa, and even more on a global level, and is concentrated nearly solely in the capital city. The urbanisation rates of over 7% per annum between 1950 and 1980 decreased since but are still at a relatively high level with continuously over 4% which, combined with the increasing overall population size, leads to more urban settlers per year than ever before.[27]

24 Karolien, V. et al., 2012. Urban growth of Kampala, Uganda: Pattern analysis and scenario development. Landscape and Urban Planning, 106 (2), pp. 199-206. Available at: https://doi.org/10.1016/j.landurbplan.2012.03.006 [Accessed 10 September 2018]; UN-Habitat, 2014. The State of African Cities 2014.

25 Karolien, V. et al., 2012. Urban growth of Kampala, Uganda; Nyakaana, J. B., Sengendo, J. and Lwasa, S., 2008. Population, Urban Development and the Environment in Kampala City and its Environs. Makerere University Kampala. Available at: http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/NYAKAANA_paperNairobi2007.pdf [Accessed 10 September 2018]; Isunju, J. B., 2016. Spatiotemporal Analysis of Encroachment on Wetlands: Hazards, Vulnerability and Adaptations in Kampala City, Uganda. PhD Dissertation, Stellenbosch University. Available at: scholar.sun.ac.za/handle/10019.1/98559 [Accessed 10 September 2018]; Richmond, A., Myers, I. and Namuli, H., 2018. Urban Informality and Vulnerability: A Case Study in Kampala, Uganda. Urban Science, 2 (22), pp. 1-13. Available at: http://dx.doi.org/10.3390/urbansci2010022 [Accessed 10 September 2018]; UN-Habitat, 2014. The State of African Cities.

26 UN-Habitat, 2014. The State of African Cities, pp. 147-150.

27 Ibid., p. 149

In order to understand Kampala's current situation, Uganda's historical development is fundamental. While just a few essential information are included in this section, a more detailed overview is given in chapter 3.2. Uganda was "granted" its independence from Great Britain in 1962, and went since then through a violence-ridden dictatorship and civil and international war-torn period until 1986 when current President Yoweri Museveni took power which he holds until today. During that time and partly still ongoing, many conflicts in the North close to South Sudan and near the borders with Kenya and the Democratic Republic Congo stressed the country's development. Nevertheless, Uganda experienced steady economic growth and became one of the leading centres of commerce in East Africa.

Uganda has only one major city, Kampala, which continues to grow in national importance, being home to about 40% of the country's urban population.[28] Despite that, there are mainly town councils which number increased from 60 in 2004 to 174 in 2013, and municipalities, rising from 13 to 22 in 2010/2011.[29] Despite the capital city of Kampala, Ugandan cities are small and have populations of 50,000 and 200,000 people.[30]

The Uganda Vision 2040, a document developed in the last years to define a pathway for the next two decades with a strong focus on urban development, highlights that the urbanisation process in Uganda has been characterised "by uncoordinated planning and developments leading to unrestricted sprawling of the major cities and towns." The over-concentration of developments in Kampala has led to "primacy putting enor-

28 Lwasa, S., 2011. Sustainable Urban Development: Managing City Development in Uganda. In: Birch, E. L. and Wachter, S. M. (eds.), 2011. Global Urbanization. Philadelphia: University of Pennsylvania Press.

29 Oxfam, 2015. Is South Africa operating in a safe and just space? Using the doughnut model to explore environmental sustainability and social justice. Available at: https://policy-practice.oxfam.org.uk/publications/is-south-africa-operating-in-a-safe-and-just-space-using-the-doughnut-model-to-555842 [Accessed 05 February 2019]; Franzsen, R.C.D. and McCluskey, W.J. 2013. 'Value-based Approaches to Property Taxation' in McCluskey, W.J., Cornia, G.C. and Walters, L.C. (eds.) A Primer on Property Tax: Administration and Policy, West Sussex: Wiley-Blackwell, 41-68.

30 UBOS (Uganda Bureau of Statistics), 2014. National Population and Housing Census 2014.

mous pressure on the overall functioning"[31] of the city itself compared to other urban settlements across the country. Furthermore, the stated goals in regard to urban transformation are to "pursue a planned urbanisation policy that will bring about better urban systems that enhance productivity, liveability and sustainability while releasing land for commercializing agriculture" while raising "the level of urbanization from 13% (2010 Baseline) to 60% in 2040".[32]

Kampala has been growing rapidly at 5.1% per year, however mostly in a segregated and unsustainable urban form with low densities. This growth rate is putting enormous pressure on the Kampala Capital City Authority (KCCA), which was put into place as a new authority for the capital's development in 2011 replacing the former City Council. Despite many notable improvements of efficiency and performance over the last eight years, KCCA's capacity to steer the development of the city is not sufficient and leaves room for many unplanned developments, often in areas unsuitable for development, such as the wetlands. It is estimated that currently, 54% of the urban population lives in inadequate conditions.[33]

Another dimension of Kampala's urban complexity is its land ownership system. Due to the shared location in the past between the Buganda Kingdom and the colonial capital and the constant expansion of the urban boundary, mailo land is a predominant land tenure type in Kampala.[34] It accounts for 75% and is leased or sold by the Buganda Land Board, while the remaining land is administered by the Uganda Land Commission. While the public land was developed in a mostly planned way, mailo land remained mostly unregulated, occupied by migrants and continues to lack access to basic services. Nowadays, little public land is available

31 Government of Uganda, 201?. Uganda Vision 2040. Draft, p.79. Available at: https://consultations.worldbank.org/Data/hub/files/consultation-template/materials/vision20204011.pdf [Accessed 14 January 2019].
32 Ibid.
33 World Bank, 2014. 50 Years of Urbanization in Africa. Examining the Role of Climate Change.
34 Giddings, S. W. (2009). The Land Market in Kampala Uganda and its Effect on Settlement Patterns. International Housing Coalition, Housing for All, Washington D.C. U.S.A; and UN-Habitat, 2013. Mobility and Urban Form. In: UN-Habitat, 2013. Planning and Design for Sustainable Urban Mobility. Nairobi: UN-Habitat.

for further development and land markets resulted in exploding property prices.

Despite the above-mentioned circumstances, Kampala grew towards a current urban population somewhere between 1.6 and 2 M (1.66 M in 2011), plus an additional 1 M daytime population and predictions of about 100,000 new urban inhabitants per year, leading towards an expected population of at least 3.5 M in 2025.[35] This high urbanisation rates lead to a sprawling urban agglomeration even outside the jurisdictional boundary of the Kampala Capital City Authority (fig. 7) and furthermore to densification and (formal as well as 'informal') infill in areas which are, either due to their soil texture and/or proximity to flooding areas, not suitable for residential areas.[36]

At the same time, only 9.1 % of the national population lived under the poverty line in 2009, which is one of the lowest in Eastern Africa.[37] However, in the Poverty Probability Index (PPI), a developed tool to compare poverty across countries and cities by integrating more factors than income alone,[38] the results opposedly highlight the comparatively high national poverty in the region while pointing out the situation of missing overall access to facilities as well as basic sanitary instalments.[39] Secondly, it shows the unequal distribution of poverty over age groups, with an intense concentration in age groups under 29.[40]

35 UN-Habitat, 2014. The State of African Cities, p. 150.
36 Karolien et al. 2012. Urban growth of Kampala, Uganda; BenBella, D. E., 2012. An Evaluation and Analysis of urban Expansion of Kampala from 1995 to 2015. Master thesis at Department of Geography and Environmental Resources, Graduate School Southern Illinois University Carbondale. Available at: http://cola.siu.edu/geography/_common/documents/papers/benbella.pdf [Accessed 11 April 2018]; Nyakaana et al., 2008. Population, Urban Development and the Environment in Kampala, p. 11.
37 UN-Habitat, 2014. The State of African Cities, p. 159
38 Schreiner, M., 2012a. Uganda 2012 Poverty Probability Index (PPI): Design Memo. Poverty Probability Index. Available at: https://www.povertyindex.org/country/uganda [Accessed 14 April 2018].
39 Richmond, A. et al., 2018. Urban Informality and Vulnerability.
40 Schreiner, M., 2012a. Uganda 2012 Poverty Probability Index (PPI): Design Memo. Poverty Probability Index. Available at: https://www.povertyindex.org/country/uganda [Accessed 14 April 2018]; further detailed in Cannon, M., 2014. Uganda Vulnerability Index Assessment Results. USAID. Available at: https://www.fews.net/sites/default/files/documents/reports/UG_zonedescriptions_en.pdf [Accessed 14 April 2018].

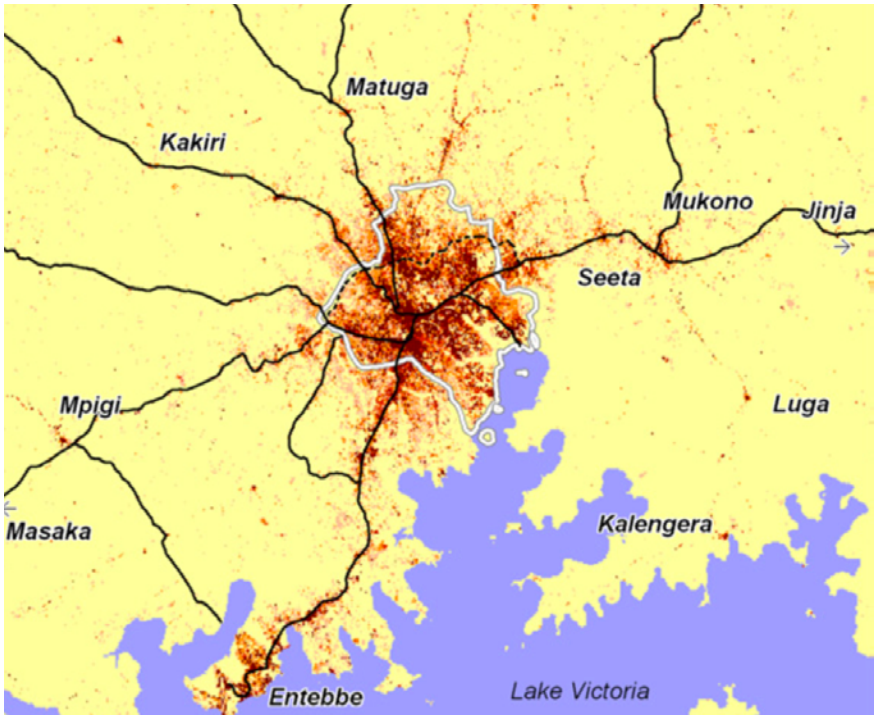

Fig. 7: Kampala's built-up area

Karolien 2012

Furthermore, the number of people who are nationally living in self-planned settlements increased from 1.5 M in 1990 to 2.5 M in 2007.[41] These self-planned settlements are often experiencing the most severe livelihood challenges and are situated in inappropriate and inaccessible locations and lack access to basic services and critical infrastructure.[42] Nyakaana et al.[43] also point out that with the growth a "lack of infrastructure, social services and [...] planning and environmental problems"[44] comes along and emphasise the interrelationships between population,

41 Schreiner, M. 2012a. Uganga 2012, p. 165

42 UN-Habitat, 2007. Situation Analysis of Informal Settlements in Kampala. Available at: https://unhabitat.org/books/situation-analysis-of-informal-settlements-in-kampala/ [Accessed 14 April 2018].

43 Nyakaana et al., 2008. Population, Urban Development and the Environment in Kampala.

44 Ibid, p. ii.

development and environmental issues.[45] The governmental institutions are highly aware of these issues today, but previous planning documents paid little attention to it. For example, the Kampala Structure Plan which was prepared in 1972 and mainly implemented, catered mostly for the European and Asian[46] residential and economic areas and did not consider the less privileged society. A revised plan from 1994 tried to cope with these arising challenges but was barely realised and let to the formation of more self-planned settlements without much institutional steering.[47] However, a more detailed look at the temporal dimension of Kampala's development follows in the historical lens in the next chapter.

Another more in-depth PPI study of the most marginalised groups (street children, 'squatters', 'slum' dwellers) further stresses the various lacks and challenges; namely (sorted according to significance): Flooding and infrastructure access; pollution; health issues (mainly related to the aforementioned); sanitary facilities; and social networks.[48] These rising pressures on the urban population of Kampala are strongly linked to the increasing climate change impacts Uganda is experiencing.[49] While the climate of Uganda always led to floods and droughts in the past with

45 UN-Habitat, 2014. The State of African Cities.

46 'Asian' is a category originating from the colonial period in many countries, which divided between European, Asian, and African settlers. Sometimes, a distiction was further made between local and foreign Africans, or between different tribal groups if relevant in the context. While this term will be used throughout when discussing historical data as no more detailed distinction is available, it should be noted that it is not seen as an adequate term (as any other generalisation) and mainly intends to describe the population with origins and ancestors from India.

47 UN-Habitat, 2007. Situation Analysis of Informal Settlements in Kampala, pp. 9-10.

48 Dimanin, P., 2012. Exploring livelihoods of the urban poor in Kampala, Uganda: An institutional, community, and household contextual analysis. Action Contre la Faim. Available at: http://www.actionagainsthunger.org/sites/default/files/publications/Exploring_livelihoods_of_the_urban_poor_Uganda_12.2012.pdf [Accessed 11 April 2018].

49 MoGLSD, 2017. Uganda Management of Social Risk and Gender Based Violence Prevention and Response Project: Environmental Management Framework. Available at: http://documents.worldbank.org/curated/en/961311498788342516/Uganda-Management-of-Social-Risk-and-Gender-Based-Violence-Prevention-and-Response-Project-Chair-Summary [Accessed 14 April 2018]; MoGLSD, 2017. Uganda Management of Social Risk and Gender Based Violence Prevention and Response Project: Environmental Management Framework. Available at: http://documents.worldbank.org/curated/en/961311498788342516/Uganda-Management-of-Social-Risk-and-Gender-Based-Violence-Prevention-and-Response-Project-Chair-Summary [Accessed 14 April 2018].

accompanying negative consequences for livelihoods, infrastructure and the economy, the recent changes further intensify these pressures. The average temperature of Uganda is expected to rise by 1.5 °C until 2027 and up to 4.3 °C until the 2080s. More frequent and extreme rainfalls are projected as well; however, they are more difficult to quantify. While the rising temperatures will have substantial effects on "water resources, food security, natural resource management, human health, settlement and infrastructure" and lead to more heat waves,[50] the rising rainfalls will result in even more flooding events which will be simultaneously more severe.

2.2 Conceptualisation of Spatial Justice

Following the introduction of the case of Kampala, an understanding of spatial justice, its constituents, conceptualisations and connected theories shall provide the theoretical foundation for the following chapters and the understanding in general. Being a central aspect of this research and a term widely used in a wide range of literature, a thorough understanding of spatial injustice is a fundamental part. In order to reach this, an overview of justice theory itself, its different types and fields, as well as the contrast to the terms of equality and equity are essential. Building upon this, the particular dimension of spatial injustice is discussed, supplemented by approaches of conceptualising and approaching it.

2.2.1 Justice

Justice, one of the two constituents of the term 'spatial justice' in its simplest definition means "just conduct, fairness, [… and the] exercise of authority in maintenance of right"[51] and is a central element of societal and communal existence of humanity. However, it can be divided into various types and fields which will be briefly discussed below. Furthermore, it is often interchangeably used with equality and equity, which

50 MoGLSD, 2017. Uganda Management of Social Risk and Gender Based Violence Prevention and Response Project; p. 12,
51 Definition of justice in the Oxford Illustrated Dictionary, 1980, 2. Edition. London: Oxford University Press.

both have distinct meanings themselves. Therefore, a short comparison of them and ways of translating them into a more tangible concept – for example the capability approach – follow, rounded off with the particular use and meaning of spatial justice.

Generally, there are four different types of justice, namely distributive justice, procedural justice, restorative justice, as well as retributive justice, which can all be applied to the spatial urban context. Distributive justice which is also called economic justice defines the fairness of what individuals or groups receive. The concept builds upon the social order and principle of socialism, with equality as the fundamental principle. The second type is procedural justice, which can be explained through the concept of fair play (a just treatment of everyone during a process). If everyone was treated fairly during a particular process, e.g., the distribution of services or goods, it is more likely that an unequal but just distribution is accepted by the various parties. This is something commonly found in today's world, from different taxation depending on the income level, or the availability of scholarships depending on the financial resources of the applicants and its supporting relatives. If neither the first nor the second type of justice are experienced, one might attempt to perform restorative justice. This type attempts to restore the situation of justice after injustice was already experienced. These restorative actions can range from merely acknowledging the preceding unjust treatment, e.g., in the form of an apology, or by bringing things back into order by compensating the imbalance. Another principle executed in our present, by reparation payments after a conflict where the wrongfully conducted damage shall be compensated for, or small issues like a warranty of a product which does not perform its function and is therefore replaced or compensated for. In the urban environment, expropriation could act as an example when someone is evicted or loses the property for reasons where she/he has no impact on and therefore experiences unjust treatment but is compensated by the monetary value or relocated into a comparable situation with the same value. Another term for restorative justice is corrective justice; correcting the unjust initial situation. Lastly, retributive justice defines the principle of punishing the party which

was acting ‘unjustly’; on the one hand with the objective to project and replicate the own experienced injustice on the other person, while also attempting to avoid further unjust behaviour by creating a disincentive for future actions. This last type of justice is the most questionable one, as the objective is likely more often revenge instead of re-building justice. However, also this can be found in many cases in the urban environment. For example, if municipal taxes which provide services for the city are not paid, a penalty fee needs to be paid to, on the one hand, restore the injustice but also offer disincentives for not contributing equally to the municipal tax household. Another example can be the non-compliance with building or zoning laws, by building a stucture which is higher than allowed and therefore needs to be demolished, leading to a substantial financial loss of the developer, which can be further intensified through an additional fee.

In the urban context, political theorist Susan Fainstein famously conceptualised justice. Building upon the ‘Theory of Justice’[52] of the philosopher John Rawls, Susan Fainstein describes the characteristics of “The Just City” in her famous book. Even though her focus is on cities in the “Wealthy Western”[53] and the capitalistic world, her general findings and definitions are valuable for any context and shall provide an alternative to solely growth and financial benefit orientated development of the neoliberal perspective.[54] However, before moving to her work, Jon Rawls’ work as well as Amartya Sen’s and Martha Nussbaum’s extensions shall be acknowledged as they all contributed significant elements to the conceptual understanding which dominates justice discourses today and simultaneously influenced Fainstein’s writings.

Rawls’ work spanned a broad range of topics of moral and political philosophy and laid the foundation for various concepts used today. Despite the many reoccurrences of justice since the Roman and Greek antique, he is often considered the ‘founder’ of today’s theoretical conceptualisation of justice, most famously with his theory of justice, which defines

52 Rawls, J., 1971. A Theory of Justice. Cambridge: Harvard University Press.
53 Fainstein, S., 2010. The Just City, p. 16.
54 Ibid.

justice as fairness and builds upon the concepts of the original position and the integration of the social contract.[55] In short, the idea behind the original position is that all members of a society choose the principles and systems of justice – highlighting his focus on social and institutional justice – without knowing which position they would occupy in the society. This shall achieve that decisions are made without the influence of personal differences and advantages of individuals for whatever reasons. Furthermore, he defined a range of principles[56] which he conceptualises on the individual and group level, and which have been reapplied often since. Rawls states that a rational person would decide to follow mainly two principles – the principle of equal liberty and the difference principle. The first says that "each person has an equal right to the most extensive liberties compatible with similar liberties for all,"[57] following an egalitarian perspective. The latter, difference principle, states that "social and economic inequalities should be arranged so that they are both (a) to the greatest benefit of the least advantaged persons, and (b) attached to offices and positions open to all under conditions of equality of opportunity."[58] While the first principle generally defines the rights and situation of all as equal, the difference principle allows for variations (e.g., in status, income, power) due to individualistic qualifications and the benefit of the imparity for the whole society. An example of the urban environment could be the city council or representative who has a higher decision-making power than the common citizen but uses his dominant position to ensure that the weakest members of the society (e.g., people with disabilities) are better off than they would be with equal preconditions than all others but due to their individual restrictions not able to perform in the same way. This principle comes with a few limitations, e.g., that there can not be a discriminatory system which limits the opportunity of some to enter the privileged position. Furthermore, the position cannot be exploited or misused by, e.g., improving the situation for people who are already

55 Rawls, J., 1971. A Theory of Justice; and Rawls, J., 2001. Justice as Fairness. A Restatement. Cambridge, MA: The Belknap Press of Harvard University Press.
56 Rawls, J., 2001. Justice as Fairness, p. 41.
57 Rawls, J., 1971. A Theory of Justice; and Rawls, J., p. 302.
58 Ibid.

well off without at least equally improving the situation of the less advantaged. In many ways, this principle is applied in various environments and scales in today's societies, ranging from elected government officials who are supposed to decide to favour the good of all and depending on the socialist character of a government, primarily focusing on the benefit for the least advantaged of the society. In larger scales, the principles of the United Nations or European Union are built upon the same concept, whereas the "ruled" individuals do not necessarily need to be people but can also be countries or regions. Furthermore, also in companies or in most organisations and societies, certain people have higher powers than others in order to benefit the whole (in theory). While these principles are a fundamental element of our understanding of justice and the functioning of our societies, it leads to some difficulties at the moment it is translated or applied to real environments.

Therefore, Amartya Sen, a (Nobel Prize-winning) economist and philosopher, developed the capability approach in order to create a more functional concept. He criticises that all three types of equality – "(i) utilitarian equality, (ii) total utility equality, and (iii) Rawlsian equality"[59] – have shortcomings. The concept behind utilitarian equality is that there can be an inequality of the distribution of goods if the total measured outcome – e.g., happiness or quality of life, is higher in the end. An example for this would be a society where 10% of the population receives much more money but sees that as a sufficient incentive to use their resources/abilities to benefit the whole society which leads to a higher quality of life of everyone. The second concept – total utility equality – tries to eradicate the problem of the above-discussed system that theoretically some people can be highly disadvantaged while the requirements of the concept are still met. Therefore, the total utility equality is based upon the goal that the least advantaged person is the baseline on which the society's success is measured – called from Sen "Welfarism."[60] While

59 Sen, A., 1979. Equality of What? The Tanner Lecture on Human Values. Delivered at Stanford University, 22 May 1979. Transcript available at: https://tannerlectures.utah.edu/_documents/a-to-z/s/sen80.pdf [Accessed 17 April 2018]; p. 197

60 Ibid.

that can already rule out some problems (and also largely overlaps with Rawls' ideas), Sen's principal criticism is that the concepts are based on an attempted equal distribution of goods or utility but that each individual might have different needs of goods (type, amount, etc.) to reach the same capability which should according to him be the goal instead. He states in more explicit words than replicable by me:

> *"Primary goods suffers from fetishist handicap in being concerned with goods, and even though the list of goods is specified in a broad and inclusive way, encompassing rights, liberties, opportunities, income, wealth, and the social basis of self-respect, it still is concerned with good things rather than with what these good things do to human beings. Utility, on the other hand, is concerned with what these things do to human beings, but uses a metric that focusses not on the person's capabilities but on his mental reaction."*[61]

He suggests to concentrate on basic capabilities and equal access to them instead and, therefore, does not disapprove Rawls' principles but sees it as a more just approach to define justice or set up institutional and societal structures for the highest benefit of each individual. Summarising, Sen's "basic capability equality"[62] system (fig. 8) builds upon Rawls but remarks that "the conversion of goods to capabilities varies from person to person substantially, and the equality of the former may still be far from the equality of the latter."[63]

61 Sen, A., 1979. Equality of What?, p. 218
62 Ibid.
63 Ibid., p. 219.

Fig. 8: Conceptual representation of Capability Approach
Author 2019

However, as Sen noted himself and attempted to improve over the course of his career, there is still the major difficulty of defining what these "basic capabilities" include and how to establish them. Martha Nussbaum, a philosopher with a focus on feminist studies, shares this concern and highlighted several times the significant problem of defining basic capability bundles and states that "whatever partial ordering can be done on the basis of broad uniformity of personal preferences must be supplemented by certain established conventions of relative importance."[64]

Therefore, Nussbaum focuses, referring to similar feminist critiques on utilitarianism and the capability approach from, e.g., Elizabeth Anderson and Bina Agarwal, on the challenge of inequality as part of differences in the people who the capabilities are defined for and how their requirements differ.[65] Susan Fainstein also raises this issue in the urban context as a critique of Rawls, extending it from feminist to multiculturalist perspectives and highlights – based on the works of Iris Marion Young and Seyla Benhabib – the need for more "recognition of difference."[66]

Nussbaum further extends on the needs as well as the difficulties of defining the set of capabilities but stresses that one

> *"can only have an adequate theory of gender justice, and of social justice more generally, if we are willing to make claims about fundamental entitlements that are to some extent independent of the preferences that people happen to have, preferences shaped, often, by unjust background conditions."*[67]

An interesting thought which will reappear at a later stage, is the role of participation in decision-making processes. While participation is – for a

64 Nussbaum, M., 2003. Capabilities as fundamental entitlements: Sen and Social Justice. Feminist Economic, 9 (2-3), pp. 33-59. Available at: https://doi.org/10.1080/1354570022000077926 [Accessed 10 September 2018]; p. 34.
65 Ibid., p. 35.
66 Fainstein, S., 2009. Spatial justice and planning. Justice Spatiale/Spatial Justice 1, p. 4.
67 Nussbaum, M., 2003. Capabilities as fundamental entitlements, p. 34.

The Central Human Capabilities

by Martha Nussbaum, 2003. In: Capabilities as fundamental Entitlements.

1. Life.

Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.

2. Bodily Health.

Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.

3. Bodily Integrity.

Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.

4. Senses, Imagination, and Thought.

Being able to use the senses, to imagine, think, and reason – and to do these things in a "truly human" way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experien- cing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid nonbeneficial pain.

5. Emotions.

Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)

6. Practical Reason.

Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)

7. Affiliation.

A. Being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.)

B. Having the social bases of self-respect and nonhumiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of nondiscrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin.

8. Other Species.

Being able to live with concern for and in relation to animals, plants, and the world of nature.

9. Play.

Being able to laugh, to play, to enjoy recreational activities.

10. Control Over One's Environment.

A. Political. Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association.

B. Material. Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human being, exercising practical reason, and entering into meaningful relation- ships of mutual recognition with other workers.

reason – currently widely promoted, Nussbaum questions up to certain point how far one can make the right decisions when being highly used to/influenced by the environment and often in the case of minorities[68] having found a kind of acceptance of the predefined role in the society or focusing on small wins or improvements instead of attempting to gain a truly equal status.[69] Therefore, Nussbaum partly supports non-participatory, and more technocratic ideologies, which somehow seems counterintuitive. However, this line of thought will reappear later. Coming back to the challenge of listing the capabilities while integrating the differences between genders or cultures, Nussbaum attempted to create a list of "Central Human Capabilities". While she neither claims comprehensiveness nor correctness, she more sees them as a starting point focussing on the most important ones, as well as going further, than for example, the human rights in their considerations for variation.[70] The full list is shown in the orange box on the left and represents already a range of elements which will reappear later on in the more specific urban context and also includes both mental and material elements.

While many of the above-discussed elements of justice theory are equally valid for the urban realm – being the primary habitat of most urban societies – they focus on more societal and institutional elements. Fainstein, on the other hand, applied and partly extended these directly to the urban context as well as its planning processes. Foremost, she sees it as indisputable that the political environment shapes the justice of the urban residents through their planning, management and policies and created four criteria to define urban justice: (1) the relation of democratic processes to just outcomes; (2) the criterion of equity; (3) the criterion of recognition; (4) the tensions among democracy, equity, and diversity.[71] She further emphasises the importance of recognition instead of plain action-focus and diversity in the needs and understandings of dif-

68 Used based on Louis Wirth's definition: "*A minority group is any group of people who because of their physical or cultural characteristics, are singled out from the others in the society in which they live for differential and unequal treatment, and who therefore regard themselves as objects of collective discrimination.*"
69 Nussbaum, M., 2003. Capabilities as fundamental entitlements, p. 34.
70 Ibid., p. 33.
71 Fainstein, S., 2010. The Just City, p. 23.

ferent individuals. Therefore, Fainstein states that the "poststructuralist thought, in its attention to group-based difference, correctly challenges liberal individualism and Marxian class analysis."[72] With that, she highlights, as mentioned above, the importance to incorporate differentiated perspectives of individuals and groups, which take, among others, "race, ethnicity, gender, religion, and culture"[73] into account.

While this can lead to emancipatory actions, it can also have adverse effects. As Fainstein remarks, that

> *"by defending strong group identifications and simultaneously opposing spatial exclusion, poststructuralism endorses a situation in which antagonisms are openly expressed and may easily result not in increased understanding of the other, but in cycles of hostile action and revenge."*[74]

This can create unwanted results, which is why Richard Sennet[75] suggest counteracting this challenge by pointing out that those who wish to live separately in a homogeneous environments might be a result of lacking exposure and argues that

> *"if the permeability of cities' neighbourhoods were increased, through zoning changes and the need to share power across comfortable ethnic lines, I believe that working-class families would become more comfortable with people unlike themselves."*[76]

The last concept to be discussed is that of justice in the city; or urban justice. This concept is building upon the rights of the citizen to urban and political spaces, which include "shelter, health care, education, dif-

72 ainstein, S., 2010. The Just City, p. 42.
73 Ibid.
74 Ibid.
75 Sennett, R., 1970. The Uses of Disorder. New York: Vintage.
76 Ibid., p. 194.

ference and economic and food security."[77] Acquiring the rights to these can be defined as struggles which however are not only the struggles for the services and access to facilities itself but can also be seen as process struggles for an increased agency, increasing democracy and involvement in the making of decisions. Therefore, struggles always require the communication of needs for social, economic and environmental justice.[78]

David Harvey[79] further includes the necessity of contextualisation of rights and justice and argues that they depend on the individual's or group's current state, needs, and desires. According to Harvey, there should be an active right for a diverse and context-based city.[80]

This is one of the reasons, why it is difficult to define urban justice altogether.[81] Smith[82] argues, that most definitions are built upon generalised notions of needs and environments and that conceptions of justice depend on the political, cultural, and economic situation and lead to various concepts of justice.[83]

Therefore, other authors[84] argue that urban justice needs to be understood in their particular circumstances – e.g., the socio-political environment and individual characteristics like gender, ethnicity, economic

77 Routledge, P., 2009. Introduction: Cities, Justice and Conflict. Urban Studies 47 (6), p. 1168.
78 see Whitehead, M., 2003. (Re)analysing the sustainable city: nature, urbanisation and the regulation of socio-environmental relations in the UK. In: Urban Studies, 40(7), pp. 1183–1206; Whitehead, M., 2003. (Re)analysing the sustainable city: nature, urbanisation and the regulation of socio-environmental relations in the UK. In: Urban Studies, 40(7), pp. 1183–1206.
79 Harvey, D., 1996. Justice, Nature and the Geography of Difference. Malden, MA: Blackwell; and Harvey, D., 2003. The right to the city. In: International Journal of Urban and Regional Research, 27(4), pp. 939–841.
80 Harvey, D., 2003. The right to the city, p. 94.
81 Routledge, P., 2009. Introduction: Cities, Justice and Conflict.
82 Smith D. M., 1997, Back to the good life: towards an enlarged conception of social justice. In: Environment and Planning D: Society and Space 15, pp. 19-35.
83 see Kobayashi, A. and Ray, B., 2000. Civil risk and landscapes of marginality in Canada: a pluralist approach to social justice. In: The Canadian Geographer 44, pp. 401–417; Smith D. M., 2000, Social justice revisited. Environment and Planning A 32, pp. 1149-1162.
84 Fraser, N., 1997. Justice Interruptus: Critical Reflections on the 'Postsocialist' Condition. New York: Routledge; Young, I. M., 1990. Justice and the Politics of Difference. Princeton, NJ: Princeton University Press.

background or age.[85] Hence, a functional and context-appropriate conception of justice can only be created if a "knowledge of the processes of inequality and injustice in the world and activists' personal involvement in attempting to transform them" exists and is included at all scales of actions.

2.2.2 Justice vs. Equality vs. Equity

After an overview of justice theory in general and its application in the urban context, and before further discussing the individual fields of justice, and spatial injustice in particular, a differentiation between justice, equity, and equality is needed. All three terms are used in recent urban studies but have very distinct meaning and should be used carefully. Equality is defined as the equal distribution of resources or rights and same treatment of everyone. Equity, on the other hand, takes different capabilities and functionings[86] into consideration and attempts to provide an enabling environment to reach the same initial position and potential outcomes for each individual or group. According to Fainstein, equity "refers to a distribution of both material and non-material benefits derived from public policy that does not favour those who are already better off

85 Harvey, D., 1973. Social Justice and the City. Baltimore, MD: Johns Hopkins University Press, Baltimore, MD; and Harvey, D., 1996. Justice, Nature and the Geography of Difference.

86 For more detailed elaboration of terms see Chapter 2.1.5

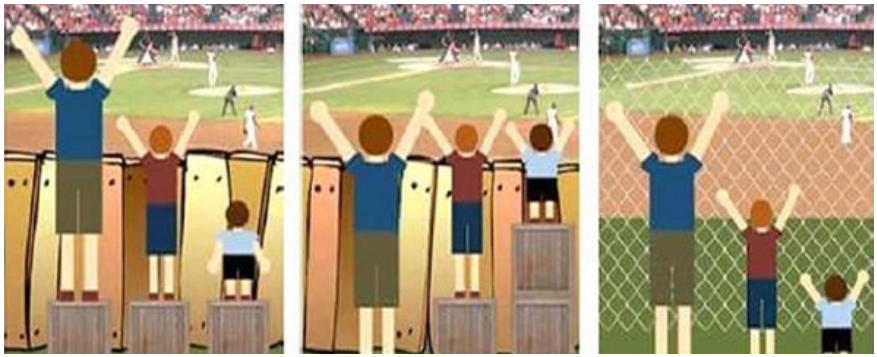

Fig. 9: Cartoon showing equality, equity and justice
Original author unknown.

at the beginning. Further, it does not require that each person is treated the same but rather that treatment is appropriate"[87] and therefore poses a significant obverse to equality itself. An often used image (fig. 9) attempts to visualise the differences in a simplified way. It shows equality as everyone receiving the same (a box to stand on) which however is not needed for the tallest and not enough for the smallest. In the second picture, the equity principle is applied, where everyone gets as much support as needed to be able to a certain action. In the third picture, it is argued that justice is achieved by removing the original problem or barrier (the wooden fence). There are many versions of the same cartoon with different solutions and interpretations, and critiques of various kinds, e.g., still having the fence or simplifying the different capabilities. However, despite its simplification – or probably due to it – the cartoon still manages to show the overall differences of the terms. It must, however, always be kept in mind that justice is a highly complex concept without either a fixed and generally agreed upon definition which makes a clear distinction difficult altogether. However, concluding it can be stated, that justice, and in particular social justice, focuses mostly on the result of a "just" treatment of people or groups, which can be, depending on the case, achieved through equality- or equity-based approaches but in some cases might also include unequal treatment which gives preferences and more power to certain people in order to achieve a better overall justice.

2.2.3 Fields of Justice

While justice can be classified in different types as done at the beginning of the chapter, there are also various fields of justice. The most common are social justice, environmental justice, and spatial justice. The first, social justice, describes the fair and just distribution of resources and coexistence of individuals and groups in the societal environment. While a variety of conceptualisations exist, the central principle is based on everyone from a society receiving a just treatment and share of the communal resources, while also contributing and fulfilling a societal role.

87 Fainstein, S., 2010. The Just City, p. 36.

The second field, environmental justice, is used in two different contexts. On the one hand, environment refers to the social environment and requires a just distribution of environmental benefits and burdens. On the other hand, and a more recent conceptualisation is the meaning of environment as the physical and natural environment and a just, sustainable treatment thereof and equal distribution of and access to its benefits. In the environmental perspective, the concept of social justice as the equal distribution of resources among social groups is extended the environment in two ways: "(1) global justice between different people of the present generation (`intragenerational justice'); (2) justice between people of different generations (`intergenerational justice')".[88]

The third field is that of spatial justice – the focus of this thesis. The general concept is built upon the idea that the organisation of space is a fundamental dimension of human societies and a material representation of social notions and has a significant influence on social relations.[89] However, two assumptions are crucial for the discussion of spatial justice. On the one hand, perfect justice is impossible to achieve, made impossible by the definition of a perfectly equal distribution of resources which human nature in itself does not allow for.[90] This, however, does not mean that it is not crucial to work towards it and attempt to achieve the most just situation – which mostly in many countries of the Global South bears still a lot of, and growing, potential. On the other hand, spatial justice is highly influenced and often merely a representation of the social justice existing within a society and therefore cannot be seen as an individual issue which can be tackled solely by spatial approaches. The urban space is in most cases a representation of the political and societal set-up, reinforced through ideological planning paradigms (e.g., structural power expression, segregation/racism, or Hitler's/Albert Speer's architecture/ spatial planning). However, the political and societal structures are more

88 Glotzbach, S. and Baumgärtner, S., 2012. The Relationship between Intragenerational and Intergenerational Ecological Justice. In: Environmental Values, 21(3), p. 331. Available at: https://www.jstor.org/stable/23240649 [Accessed 23 December 2018].
89 Lefebvre, H., 1968. Le Droit à la ville. Paris: Anthropos; and Lefebvre, H., 1972. Marxist Thought and the City. Paris: Casterman.
90 Marcuse, P., 2009. Spatial justice: derivative but causal of social injustice. In: Spatial Justice 1.4, pp. 1-6.

flexible and have a higher adaptivity. This can result in spatial injustices as remnants of former structures which keep them alive and reinforce them and lead to higher "half-lives" of injustice's spatiality.

Referring back to the different types of justice, all types – restorative to a limited extent – are significant elements of spatial justice. For example in the context of land markets, distributive justice can be related to the distribution of land and property itself but also the distribution and provision of services to various areas. Restorative, or corrective justice is often attempted in recent times by trying to acknowledge a wrongful behaviour and compensate it but is less relevant in the context of the counterpart of justice – injustice. There can generally be no restorative injustice, as it attempts to reverse the injustice in itself. Another crucial and highly applicable example is however procedural justice, which in the case of land markets, can be applied to the processes of acquiring land, formalising self-planned settlements[91] or in other policy instruments which aim, for example, at urban upgrading. In the case of procedural justice, a further distinction can be made between the outcome of a process and the process itself. For example, a 'just' process can lead to unjust outcomes, if for example the same, equal fee is charged for a certain service, which however is only affordable for a small fraction of the population. On the other hand, an 'unjust' process, like a different treatment of varying ethnic groups can lead to a just outcome by executing restorative injustice and correcting a previously existing injustice.

The distinction between process and outcome and their connections is essential to understand different types of spatial justice. Spatial justice cannot exist as an overall approach for an urban entity. Instead, it needs to be conceptualised as processes as an integral part of political spaces. In such spaces, different visions may compete or coexist, with the

91 Self-planned settlements is used in an attempt to use a non-degratory term for areas which are otherwise called slums, favelas, or informal settlements. However, most used terms carry a negative notion with them, e.g., in the case of informal settlements which can lead to the perception of the people living within being informal, while it merely describes the informality of land tenure and even that just depends on political instruments of property management and does not equal in actual wrong-doing or illegality or informality.

power held by different actors negotiating for equitable processes and outcomes, which vary considerably. Acknowledging such power differentials, in The Just City, Fainstein[92] agrees that we can never fully attain a just city. Instead, she argues that planners should move towards a conception in which justice is improved for the most disadvantaged. This allows for a progressive procedural realisation of equity that focuses on a specific target group.

While being two different fields, spatial justice discourses can build upon concepts of environmental justice. In urban planning, there has long been a concern about the limitations of using sustainability-oriented urban policies to address social justice issues.[93] Social justice and environmental sustainability emerge as interdependent problems that challenge existing power structures.[94] The linkages between environmental change, land transformation and social justice are apparent in empirical evidence of how environmental degradation and resource scarcity is experienced by the urban poor. Unsafe and inadequate water supplies, provision of sanitation and waste management, overcrowding, lack of safety, and different forms of air and water pollution continue to shape the lives of many citizens around the world.[95] For example, almost 10% of deaths in low-income regions are directly attributed to environmental risks such as unsafe water, outdoor and indoor air pollution, lead exposure and impacts from climate change. The latter has a visible impact on human development. Poverty and inequalities in access to resources and livelihood opportunities increase the vulnerability of the urban poor to climate

92 Fainstein, S., 2010. The Just City.

93 Marcuse, P., 1998. Sustainability is not enough, 10(2), pp. 103-112. In: Environment and Urbanization. Available at: https://doi.org/10.1177/095624789801000201 [Accessed 21 January 2019].

94 McLaren, D. 2003. Environmental space, equity and the ecological debt. Just sustainabilities: Development in an unequal world, pp. 19-37.

95 McLaren, D. 2003. Environmental space, equity and the ecological debt. Just sustainabilities: Development in an unequal world, pp. 19-37; Forsyth, T., Leach, M. and Scoones, I., 1998. Poverty and environment: priorities for research and policy – an overview study. Sussex, 49; and Hardoy, J. E. and Satterthwaite, D., 1991. Environmental problems of third world cities: A global issue ignored. Public Administration and Development 11, pp. 341-361.

change impacts and natural disasters.[96] Incorporating notions of justice in environmental policy and planning emphasises both the distributional effects of environmental degradation and resource scarcity and the need to adopt decisions that emerge from a fair and open process of policy-making. Departing from the notion of justice means raising the social and ecological concerns within an unsustainable and unjust economic system, and thus, it may be a way to redefine the meaning and context of planning.[97]

Spatial justice tries to call for a reflection on the spatial nature of inequalities and social interactions that are created and reproduced through various relationships. In a way, spatial justice tries to advocate for more extensive control of spaces in cities. According to Edward Soja, spatial justice ensures that a more participatory and progressive form of social activism and democratic politics is enabled.[98] At the same time, spatial justice acts as an intermediary between politics and culture, especially when Soja asserts that arrangement and design of a place are essential in enabling a sense of ownership and disciple of the society. In addition to that, space uniformity and organisation plans for a community and how it emancipates individuals.

2.2.4 Translating theory into practical concepts

While the different beforehand mentioned types and fields of justices and injustices can be applied in various ways in a theoretical manner, it can also be beneficial to translate the theories into more tangible concepts. One famous way to do so, the capability approach by Amartya Sen has already been introduced above. It can be roughly seen as a combination of capabilities and distributive justice. The concept builds on liberalism and divides between functioning and capabilities. The first can be described as “states of ‘being and doing’ such as being well-nourished or having shelter. They should be distinguished from the commodities em-

96 Hardoy, J. E. and Satterthwaite, D., 1991. Environmental problems of third world cities: A global issue ignored. Public Administration and Development 11, pp. 341-361.
97 Rydin, Y., 2013. The future of planning. Policy Press.
98 Soja, E., 2009. The City and Spatial Justice. In: Spatial Justice 1.1.

ployed to achieve them (as 'bicycling' is distinguishable from 'possessing a bike')."[99] Capabilities, on the other hand, refer to the "set of valuable functionings that a person has effective access to. Thus, a person's capability represents the effective freedom of an individual to choose between different functioning combinations – between different kinds of life – that she has reason to value."[100] The central idea is to divide between the actual possession of property or reached outcome and the initial situation and set of available opportunities – hence capabilities. As Fainstein defined it, "one need not exercise one's capabilities if one chooses not to, but the opportunity must be available, including a consciousness of the value of these capabilities"[101] This concept emphasis a crucial element of the perspective through which injustice is looked at. There is little what can be done to generate the same situation for everyone, but instead, approaches should attempt to provide the same opportunities and therefore establish room for the individual preferences and priorities of each human being.

Furthermore, two more tangible approaches shall be used to show the variety of scales and perspectives, while at the same time both highlighting essential elements for the broader context. The first one is the long-standing discussion on the GDP growth and its relation to development. Wealth or financial and economic indicators are often used to compare various levels ranging from individual or household income to countries economic performance. While it is still a commonly used indicator which of course can indicate important aspects like the status and development of the economy, Richard Easterlin published in 1974 the concept of the Easterlin paradox which proved that GDP growth does not necessarily come along with increased happiness, at least if the starting point has a certain minimum value, or can even negatively

99 Wells, T., 201?. Sen's Capability Approach. Available at: https://www.iep.utm.edu/sen-cap/#SH3a [Accessed 17 December 2019].
100 Ibid.
101 Fainstein, S., 2010. The Just City, p. 55

correlate.[102] His main findings were:

> *"1) Within a society, rich people tend to be much happier than poor people; 2) But, rich societies tend not to be happier than poor societies (or not by much); 3) As countries get richer, they do not get happier."*[103]

He argues that life satisfaction rises with average incomes but only up to a certain point. While some have questioned the results since; many replicated similar results. Among others, economist Richard Layard proved in a variety of scales and environments in his 2005 book 'Happiness: Lessons from a New Science" that improved financial prosperity and quality of life does not equal happiness. Instead, one of the highest impacts on the own perceived happiness seems to be the comparative wealth and income in relation to the direct environment (family, friends, neighbours).

Let's look at how this becomes highly relevant for the inequality context. There are two aspects in which it affects the previously presented theories. On the one hand, happiness or well-being is often used as the indicator for achieving justice and also used in global comparisons (e.g., in the annual World Happiness Reports), and most of the times based on improved circumstances of life (e.g., income, property). However, if there is no provable positive correlation one could ask if the improvement of the assumed important aspects of life quality are the ones which should be considered most crucial. While this is a fundamental element which will be taken up again in the later chapters, one finding was found across many studies and fields. Even if certain financial and material improvements have mostly no strong overall impact, there is a specific baseline under which it negatively affects the well-being significantly. E.g., if the income does not allow to pay for basic needs, stress has a strong negative impact. Therefore, the findings can partially be combined with

102 see, e.g., Nussbaum, M., 2003. Capabilities as fundamental entitlements, p. 34, and Easterlin, R. A., 1974. Does economic growth improve the human lot? Some empirical evidence. In: P. A. David and M. W. Reder (eds.): Nations and Households in Economic Growth. Essays in Honor of Moses Abramowitz. NY: Academic Press, pp. 89–125.
103 Easterlin, R. A., 1974. Does economic growth improve the human lot?

the concept of basic capabilities which set a minimum baseline which shall be achieved for all. However, another issue remains. If the individual happiness or well-being is most positively influenced by having more than the direct environment, it would mean that true happiness for one requires injustice and unequal distribution of goods. This conceptual dissent, which might be one of the many limiting factors of the human character in achieving justice, is another crucial element for the later discussion.

However, regardless of the Easterlin paradox, ways have been developed to measure economic equality as an addition to the GDP which is today widely in use. Corrado Gini, an Italian mathematician, developed the Gini coefficient as an alternative or extension to GDP which was in the past and is still often used to quantify development and overall performance of countries and cities. Fig. 10 shows the concept behind it: On the x-axis is the cumulative share of income earned shows, and on the y-axis is the cumulative share of the population, sorted by income. The straight line – 'Line of Equality' (x =1y) – means that everyone has exactly the same amount of income or wealth depending on what is measured. The Lorenz Curve shows exemplary, how a realistic distribution can look like, where 80% of the population has 50% of the income. Therefore, the red field 'A' increases with rising inequality. While it can only be used to measure

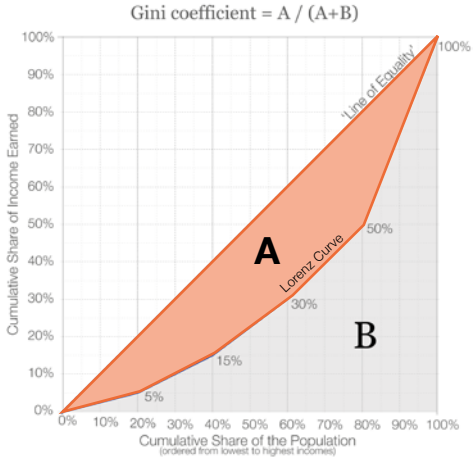

Fig. 10: Visual explanation of the Gini coefficient of inequality
Our World in Data. Available at: https://ourworldindata.org/uploads/2013/12/Gini-measure-schematic_simplified.png

monetary information such as income and does not consider differences of needs (measuring equality not required equity), it is still one of the most common indicators for inequality on the global scale and has the potential to show developments over time. While no disaggregated data is available for Kampala itself, for the whole of Uganda it shows a negative tendency (fig. 11) with a Gini coefficient of 0.365 in 1992/93 and its rise to 0.47 in 2014/15 (higher coefficient means higher inequality).

This data cannot accurately show the overall development; however, it shows that at least income inequality is further on the rise and therefore again highlights the importance of the topic in Uganda.

OXFAM, who also calculated the Uganda Gini coefficients above, has typically a very financial and quantitative approach to define and measure inequality. However, they also developed a quite comprehensive framework known as the OXFAM doughnut (fig. 12) which shows an inner ring as the social foundation and an outer ring as the environmental ceiling; both being composed of various elements. In between, they define the "safe and just space humanity."[104] The model was developed and adapted to the South African context which shares some similarities to Uganda and while also not being able to show the whole complexity, it manages to incorporate various crucial constituents, including less tangible and

104 Oxfam, 2015. Is South Africa operating in a safe and just space? Using the doughnut model to explore environmental sustainability and social justice. Available at: https://policy-practice.oxfam.org.uk/publications/is-south-africa-operating-in-a-safe-and-just-space-using-the-doughnut-model-to-555842 [Accessed 05 February 2019].

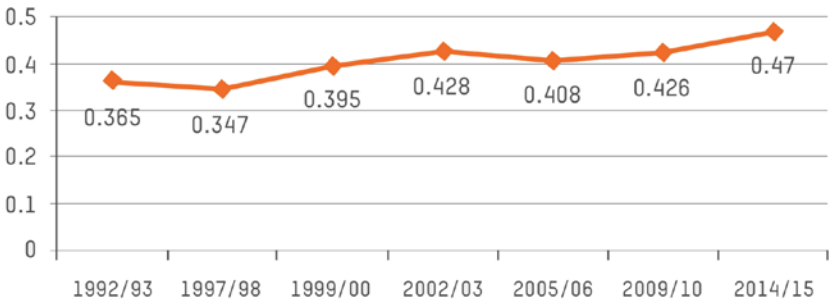

Fig. 11: Trends of inequality, measured by Gini coefficient from 1992-2015

Gini coefficient based on data from UBOS (2002/03; 2009/10; 2014). Source: OXFAM, 2017. Ending Inequality in Uganda. Available at: https://www-cdn.oxfam.org/s3fs-public/file_attachments/oxfam_in_uganda_inequality_report_compressed.pdf [Accessed 26 January 2019], p. 33.

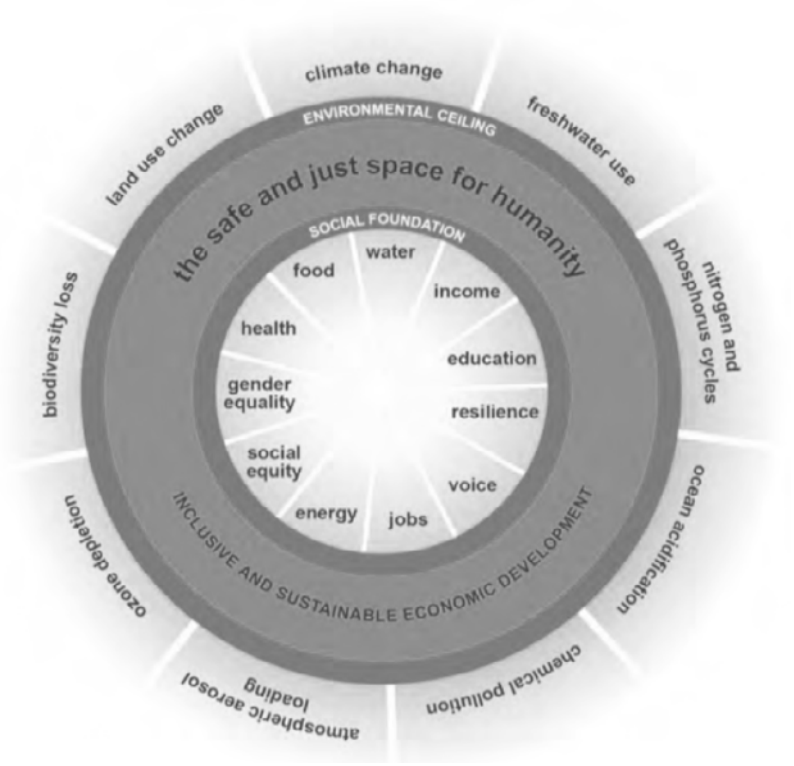

Fig. 12: OXFAM doughnut

Oxfam, 2015. Is South Africa operating in a safe and just space? Using the doughnut model to explore environmental sustainability and social justice. Available at: https://policy-practice.oxfam.org.uk/publications/is-south-africa-operating-in-a-safe-and-just-space-using-the-doughnut-model-to-555842 [Accessed 05 February 2019].

qualitative elements, while still being providing a functional tool for development planning and to create policy recommendations.

2.2.5 Temporal Injustice of Sustainability-driven Development

Lastly, before moving on to the discussion of the spatial dimension, a quick remark on a perceived injustice between the Western countries and the Global South shall be made. The Western world developed in other circumstances where sustainability and many social concerns like labour rights did not exist in the way they do today. And today, while still contributing most to the global pollution, often dictate through policies, economic sanctions, or condition-bound development aid or investment, more sustainable growth-paths for developing countries which are less efficient and therefore put countries which currently undergo the 'industrialisation' in a comparatively worse situation. While the objective of more sustainable growth is of course positive, there is an unbalance between the opportunities in the past and today, combined with countries most contributing to climate change being mostly the ones who are least affected and have the highest capacity for adaptation, while those who contributed the least experience the opposite – with Kampala being on example of it. As Campell phrased it:

> *"Referring back to temporal/intergenerational equity perspective of environmental justice: Slowing worldwide industrial expansion may preserve more of the world's resources for the future (thereby increasing intergenerational equity), but it may also undermine the efforts of the underdeveloped world to approach the living standards of the west (thereby lowering international equity)."*[105]

105 Campbell, S., 2003. Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development. In: Readings in Planning Theory, edited by Scott Campbell and Susan S. Fainstein, 435-458. Oxford: Blackwell, p. 445.

Fainstein also raised this, while she further introduces the issues of "intergenerational or species equity."[106] However, these are supposedly included in the concept of sustainability and would expand the scope too far, but are too important to be left out altogether.

2.3 Meaning + Production + Power of Space

In the third section, the importance of space in society shall be discussed more in detail. The term space encompasses much more than the material and built environment itself, but has a variety of roles in the lives of urban residents. It can simply provide a public place to commute, meet, spend time, and interact with the community or with strangers. Furthermore, it can be the scene of political emancipation and expression and act as a driver of agency. Some examples for the latter were the protests against the Chinese government on the Tiananmen Square in 1989, and the demonstrations and the fall of the Berlin wall in the same year, or more recently in 2011 the Occupy Wall Street protest in Zuccotti park in New York's financial district, or the start of the Arab spring in the Tahrir Square in Cairo, Egypt in the same year. In each case, the place, often a public square, became the main focal point of the protests, served as a camp and permanent base of the opposition and played a significant role in the further development. In order to understand the meaning and the making of space, as well as the difference between a space and place better, the following aims at defining some of the underlying concepts better and emphasise the importance and role of space in the city for residents in general but also for the justice movements and the availability and accessibility to them.

Bromberg et al.[107] asserted that justice and space are two intrinsically linked notions. They are not handed out or given; rather they are both reflections of the current social, political, and economic climate of a place. Those responsible for creating spaces, (whether it be financially, planning, development, political will, activism among others) have the power to

106 Fainstein, S., 2010. The Just City, pp. 53-54
107 Bromberg, A., Morrow, G. D. and Pfeiffer, D., 2007. Editorial note: why spatial justice? In: Critical Planning, 14, pp. 1–6.

create just spaces, and through this influence the lives of the inhabitants. This is substantiated by Bromberg et al.[108] when they discuss "how the social production of space, in turn, impacts social groups and their opportunities." In this context, justice "is the result of the shared of engaged actors in the socio-spatial systems they inhabit and (re)produce."[109] This renewed insight recognising the inter-relationship between justice and space is the foundation of understanding spatial justice, being, therefore, a fundamental precursor for creating a vibrant society. Edward Soja also supports the importance of the interrelation and states that:

> *"Thinking spatially about justice not only enriches our theoretical understanding, it can uncover significant new insights that extend our practical knowledge into more effective actions to achieve greater justice and democracy."*[110]

2.3.1 Production of Space

If space and justice are intrinsically linked, and space being the locale of social justice practices, the question arises what the role of space is, how it evolves or how and by whom it is produced, readjusted, and shaped. This section shall provide an overview of some of the ideas behind the production of space, followed by the power which is linked, created, or executed by or through it.

Dikeç, a human geographer and urbanist, argues that the production of space manifests in different forms of injustice but also creates them. He further argues, that injustice is produced through the spatiality of injustice on the one hand and the injustice of spatiality.[111] The first refers to the materialisation and socio-economic conditions which produce injustices, while the latter defines the spatiality-induced inability to develop

108 Bromberg, A., Morrow, G. D. and Pfeiffer, D., 2007. Why spatial justice?, p. 2.
109 Deutsche, R., 1996. Evictions: art and spatial politics. Cambridge, MA: MIT Press, p. 269.
110 Soja, E., 2009. The City and Spatial Justice. In: Spatial Justice 1.1, p. 1.
111 Dikeç, M., 2001. Justice and the spatial imagination. In: Environment and planning, A 33.10, p. 1785-1805.

meaningful political and cultural agency and vicious cycles of reinforcing injustice due to pre-existing built environments.[112]

Edward Soja, a political geographer and urban theorist, who contributed substantially to the justice discourse in cities, highlighted in his book "The City and Spatial Justice" three principles which are according to him crucial to critical spatial thinking:

> *a) The ontological spatiality of being (we are all spatial as well as social and temporal beings)*
>
> *b) The social production of spatiality (space is socially produced and can therefore be socially changed).*
>
> *c) The socio-spatial dialectic (the spatial shapes the social as much as the social shapes the spatial)"*[113]

The three principles highlight a range of relationships and interconnections between the social justice discourse and the built environment. The first focuses on the ontology of 'being', which is fundamentally spatial. Humans are always spatial and their lives, interactions, routines, and existence is always linked to and situated in the spatial realms. Therefore, the spatial dimension is crucial for human existence and links directly to many non-tangible elements of our lives as it is the arena as well as a platform for any kind of (inter-)action. The second principle focuses on the production of space being a social process. This means that space is not only created by the physical act of, e.g., building it, but through social processes which again highlight the importance of the 'mental' and non-tangible dimension of space and its impact on the creation and adaptation thereof. Lastly, he mentions the socio-spatial dialectic and hence embraces the bi-directional reciprocity of social and spatial processes and matters. These three principles, which seem widely uncon-

112 Dikeç, M., 2001. Justice and the spatial imagination, pp. 1792-1793; Merrifield, A. and Swyngedouw, E., 1997. The Urbanization of Injustice. New York: New York University Press.

113 Soja, E., 2009. The City and Spatial Justice, p. 2.

tested, are the central basis for the idea of spatial injustice as being much more than simply an unjust distribution of space or resources, but space, and more importantly urban space being a fundamental element of societies and livelihoods in cities.

To further look into the meaning of space, and more importantly, the production thereof, philosopher and sociologist Henri Lefebvre's discussion, mostly in his book on the 'Production of Space' and 'The Right to the City' are fundamental. While this is no attempt to summarise his work – which I would not be capable of, mostly in the scope of this work – I want to extract some applicable, relevant and linked key messages which can contribute to the central discussion of different dimensions of spatial justice.

Generally, Lefebvre uses different conceptual categories throughout his work, namely conceived, perceived and lived spaces. He refers to the first as 'Representations of space', while he links perceived spaces to 'Spatial practice' and Representational as lived spaces, all connected or overlapping with the social space (fig. 13). Lefebvre defines the two central categories 'Representations of space' and 'Representational spaces' as the more tangible manifestations while the 'Spatial practice' or perceived space focuses more on the processes linked with the production of space. He sees the first as the dominant in any society[114] and describes the 'Representations of space' as:

> *"conceptualized space, the space of scientists, planners, urbanists, technocratic sub-dividers and social engineers, as of a certain type of artist with a scientific bent - all of whom identify what is lived and what is perceived with what is conceived."*[115]

114 Lefebvre, H., 1991. The Production of Space; pp. 38-39.
115 Ibid.

Representational spaces, on the other hand, are described as:

> *"space as directly lived through its associated images and symbols, and hence the space of 'inhabitants' and 'users'"*[116]

The second is the dominated – and hence passively experienced – space which the "imagination seeks to change and appropriate", overlapping with the physical space.[117] The physical space is space as typically referred to, while mental space is the imagined space – mostly by planners

116 Lefebvre, H., 1991. The Production of Space, p. 39.
117 Ibid.

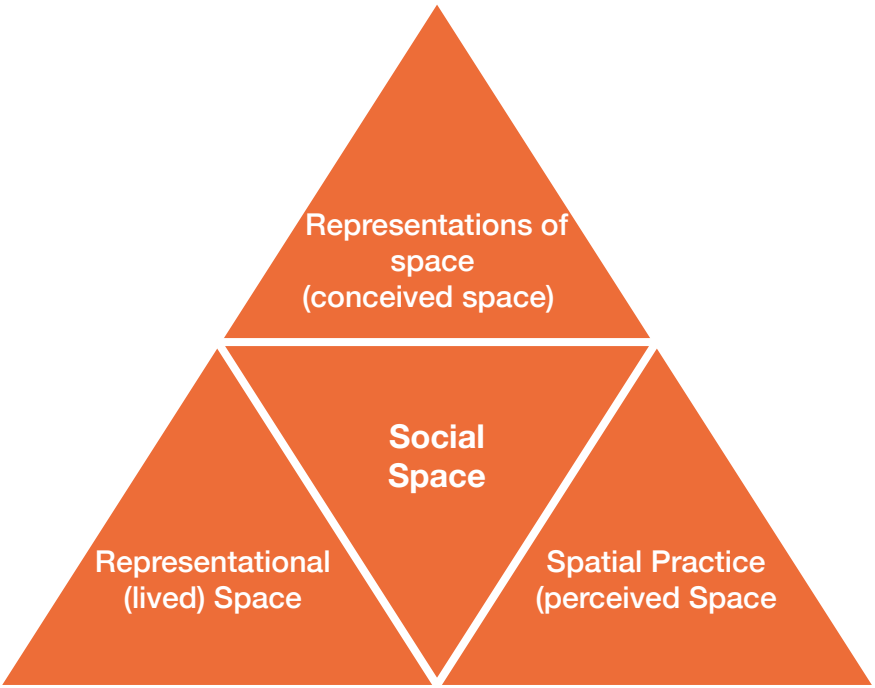

Fig. 13: Conceptual representation of Lefebvre's space triad

Based on illustration by Hansen, M., 2013. New geographies of conservation and globalisation: the spatiality of development for conservation in the iSimangaliso Wetland Park, South Africa, Journal of Contemporary African Studies, 31:3, pp. 481-502.

or planning authorities. Lastly, social space is somehow situated in between and influenced by the physical and mental space but mainly originating from the lived experience and its associated symbols and meanings. Furthermore, social space is on the one hand more individualistic as it can manifest differently in everyone's mental creation, while it is also much more volatile and adaptive to fast-changing external attributes and circumstances. Contrarily, physical and mental spaces are either more stable and only slowly adapting due to them being the built environment or engraved in planning documents and paradigms. Building upon these different types of spaces, Lefebvre conceptualises the production of space as far more than the building process itself. Instead, it is a process combining the three types of spaces, their short- or longevity and all institutional, mental, individual, and physical acts which are altering them in one way or another.

Therefore, based upon the concept of diversely produced spaces, it is a continuous process which introduces another temporal layer, or the 'history of space'; meaning that space is not only a material (or mental) manifestation of various influencing matters but a results of completed and on-going processes which are crucial for its understanding but also highlight space's plasticity.[118]

So, if space is according to Lefebvre's and Soja's concepts socially, a mentally and politically constructed and contested element which is neither fixed nor finished, the question arises how it can be shaped in a positive manner – mostly in this work's focus of counteracting existing or even rising spatial injustices. For this ambition, Lefebvre's concept of 'Spatial practice' comes into play which is built upon the understanding that space is more likely to be produced in a societally agreed manner if it is socially practised instead of planned as it was (and is) primarily the case in most urban areas – at least as the official planning paradigm. While this line of thought originates from more than three decades ago, it can be rediscovered in many of today's practices of 'place-making',

118 Lefebvre, H., 1991. The Production of Space; p. 46.

bottom-up/grassroots initiatives or 'tactical urbanism' which continues to gain popularity around the globe while rigid master plans experience more discontent than ever before. Coming back to Lefebvre, he described spatial practice focusing on social importance as well as the two-directional inter-linkage:

> *"The spatial practice of a society secretes that society's space; it propounds and presupposes it, in a dialectical interaction; it produces it slowly and surely as it masters and appropriates it. From the analytic standpoint, the spatial practice of a society is revealed through the deciphering of its space."*[119]

Therefore, the production of space can be summarised as a societal and time-bound process which results in a variety of spaces which constantly evolve and adapt through their environment and are composed of much more than their physical representation. Furthermore, it is important to note that according to this understanding of space, there is not just one space but a multiplicity of overlapping, self-inflicting, and poly-directionally influencing social spaces – according to Lefebvre of unlimited number – which do not simply disappear or are replacing each other over time but coexist and, while they are seen as one 'space' are constituted of a many.[120]

Building upon these ideas and considering that the social dimension has such a fundamental role, what is the importance of the physical space and therefore planning altogether? Building upon philosopher Foucault's conceptualisation of space, Miloje Grbin argues that:

> *"It is acknowledged that making an architectural/urbanistic setting for desired social relations and practices does not produce them automatically. But it is also true that certain kinds of social praxis and social relations require*

119 Lefebvre, H., 1991. The Production of Space, p. 33.
120 Ibid., p. 86.

a certain architectural/urbanistic setting so they can be conducted."[121]

Therefore, we can conclude that the spatial dimension of cities, or space itself, is a socially constructed combination of a variety of spatial manifestations which evolve and develop over time, are influenced by their physical environment/materialisation but are predominantly defined by the society using them – and this makes space in this notion a crucial constituent for the discussion of urban justice and even more of thinking about it as a tool or vehicle of constructive alterations towards more just urban societies. With this being said, one last important consideration is the power this space actually can have or, in other words, how space functions as a driver, representation, and adaptation of power.

2.3.2 Power of Space

Space and power are two elements which influence each other in a variety of ways. A certain power (e.g., political/institutional) is needed to create at least a portion of the physical dimension of space, while it can also function as a symbol or demonstration of power. Additionally, the access to spaces often differ for various groups of the society and, therefore, empower or disempower them, or can act as platforms for increasing agency and, for example, political or societal emancipation while simultaneously being able to restrict them. And each of this connections can have an influence on justice in the city; e.g., by reinforcing existing injustices through accessibility restrictions or on the contrary empowering groups to fight injustices by creating a spatial platform for protest. Or as Edward Soja states, the "intersection of space, knowledge, and power can be both oppressive and enabling."[122]

While referring again to some of Lefebvre's work, I will also borrow two concepts of Foucault, namely that of Heterotopia and the Panopticon, as tools to conceptualise urban phenomenon which are widely found in the socio-spatial environment of cities in general and even more so in

121 Grbin, M., 2015. Foucault and Space, p. 307.
122 Soja, E., 2009. The City and Spatial Justice, p. 2.

sub-Saharan Africa – and will be picked up again in the case of Kampala over the course of the next chapter.

Lefebvre as one of the first who strongly rooted for the importance of space in the social theory defines four different types of social spaces with distinct functions and characteristic accessibilities and right.[123] There is accessible space for normal use which is "governed prescriptively – by established rules and practical procedures.", "boundaries and forbidden territories […] spaces to which access is prohibited either relatively […] or absolutely", "places of abode", and "junction points."[124] While it can be questioned if all physical, social spaces can be classified in these four categories, they still have different characteristics and their functions influence their role in the overall systems as well as in how they relate to power. Lefebvre continues to highlight their difference while also mentioning that there are overlaps and that a complete categorisation is impossible:

> *"Social space embodies distinct and distinctive 'traits' which attach to the 'pure' mental form of space, without, however, achieving a separate existence as its external super-added content."*[125]

In the direct context of power, the different types have varying importance for power dynamics. The first type – places for general use – encompass a variety of spaces which all have defined roles and functions. An example for this is a market, which can be accessed by everyone but has a clearly defined role and would lead to possibly both institutional and societal repercussion if used differently as it would disturb the usual set-up. The second category of places with restricted access – can be for example representative squares which are utilised as places to demonstrate power. Mostly during dictatorships and totalitarian regimes, these were/are often utilised for parades, events for the public like polit-

123 Lefebvre, H., 1991. The Production of Space, p. 90.
124 Ibid., p. 193.
125 Ibid., p. 292.

ical announcements, or as simple representations of the power through the sheer size and scale of them. They are mostly out of the human scale and impose something much more important and powerful than the individual. The third category of “places of abode”, define places of temporary or permanent residence or what can be defined as home. These can be individual houses, while also including shared semi-private spaces such as neighbourhood squares which can be directly associated to a specific group and number of people who do not necessarily own the place but are the predominant users thereof. In regard to power and justice, there can be a significant difference between the size, quality, security, and design of these spaces for different individuals and groups which imply a varying status and accompanying power. An extreme example – which will be further extended on afterwards – are non-private spaces in gated communities which are directly ‘owned’ by the residents of the community and provide a level of comfort and safety which differs from spaces outside with the same theoretical role. The last type is junctions, which are especially interesting spaces because they can have overlapping ‘user’ groups and functions and are places where different systems may collide.

Furthermore, they are places of an overall network and are, therefore, crucial elements in regard to accessibility – which can be positive and negative in the same way. For example, junctions can be crucial for easy reachability to service facilities in the city, like public transport, and can improve the situation for the surrounding area. On the other hand, they can be also part of a system of control. Despite ancient examples of military layouts in, e.g., the Roman Empire, Haussmann’s plan for Paris which laid out a new network of major links and junctions, was both a way of showing power while also guaranteeing better access by the military to all places to ensure a military/police control in case of political unrest. Plenty recent examples can be found in many self-planned settlements which are upgraded by new roads or places like the cable car stations in Medellín (further information in chapter 3) which, on the one hand, provide better access to the overall city to the residents but also double as access routes for the police (to fight crime, drug trafficking

etc.) or even as in the case of the cable car, become new police stations on top of a mountain, demonstrating dominating power. This is just supposed to provide a brief overview of the different types and their potential roles, however, there can be many more types, with various accentuations, which all have a varying, and in many cases several, implications for the power dynamics in the urban realm.

Moreover, Lefebvre calls space "itself to be politically instrumental in that it facilitates the control of society" and a medium which "underpins the reproduction of production relations and property relations" and, therefore again has a major impact on power through producing a hierarchy of ownership and role in the society. Lastly, he states that spaces can also act as

> *"institutional and ideological superstructures that are not presented for what they are […]; alternatively, it assumes an outward appearance of neutrality, of insignificance, of semiological destitution, and of emptiness"*

While these characteristics do not necessarily imply a positive role of produced spaces in the socio-spatial fabric, Lefebvre also bestows space "potentialities – of works and of re-appropriation […through] a body which by putting up resistance inaugurates the project of a different space."[126] Therefore, space is often accompanied by power mechanisms and demonstrations, but also can be seen as a vehicle for political and societal emancipation and is initially conceptually neutral and only gets assigned a viewpoint-dependant function and utility by its use and societal and institutional appropriation.

An analogy or spatial metaphor which is often referenced in the context of the power of public spaces is the idea or design of the panopticon (fig. 14). It is a circular prison layout where all cells are arranged around a central watchtower which results in constant possible surveillance without the prisoners knowing if they are currently observed or not. A concept

126 Lefebvre, H., 1991. The Production of Space, p. 349.

developed by Foucault, he states that it “is overwhelmed by impersonal power and starts to control himself […leading to an] internalisation of norms.”[127] Despite having inspired actual prison designs, it is often used as a reference for power-through-control situations. In the urban context, it functioned in a more traditional sense as an example for a space with either present security forces or the possibility of their presence. Therefore, the theoretical possibility of law enforcement presence acting as a social control mechanism and being a substantial form of power expression in the public realm. Nowadays, the reference is more often used for technological surveillance as a creator of a feeling of constant control. In many countries in sub-Saharan Africa, many high-income neighbourhoods are dominated by security posts or CCTV cameras which highly interfere with the freedom in otherwise public space. While this is again a different type of indirect demonstration of power, it can have a significant impact on who is using which space and how comfortable one feels, while the continuous rise of technology as part of smart cities, and other similar directions, further increases the importance thereof for the future.

127 Foucault in: Grbin, M., 2015. Foucault and Space, p. 308..

Fig. 14: Panopticon | Interior View of Cell Home, Illinois State Penitentiary at Stateville

Source: https://deadphilosophersguide.com/2018/08/10/foucault-panopticism-and-digital-power/ [Accessed 17 February 2019]. Original source unknown.

A variety of spaces, their roles, and broad utilisations were discussed. However, there is another category of spaces which cannot be assigned to any other category. Michel Foucault defined these as 'Heterotopias'[128] which are the "other places […| which have a system of openings and closing – which make them penetrable and isolated."[129] These are spaces which – somewhere in the reality between utopia and dystopia – include all the spaces in the urban area which have particular functions or non-functions only for certain groups or times and most often are disruptions of the urban fabric. These spaces can be, for example, religious sites or theatres, while in the modern terms and in the context of sub-Saharan Africa, large scale shopping centres as the often only (capitalistic semi-private) 'public' spaces or gated communities might be the most related typologies.

These "other spaces" take an important role in the urban realm. They are not really fitting in while additionally deranging the existing urban fabric through different kinds of access controls and definitions of who can enter and who cannot due to (non-)belonging to a class or group. Despite a list of principles (see orange box on the right), Foucault states that:

> *"the otherness of heterotopia represents perceptual meta-disruption"*[130]

The case of gated communities as Heterotopia – however in the context of the suburban United States – was also made by Setha Low.[131] She highlighted the main drivers of longing for (perceived) safety, feeling of belonging to a higher/specific social class and being externally exclusive and internally inclusive at the same time. These types of settlements which are already dominating the urban structures in many sub-Saharan cities, are further mixing and diverting the division of public and private by

128 Grbin, M., 2015. Foucault and Space, p. 309.
129 Ibid.
130 Ibid., p. 310.
131 Low, S., 2008. The gated community as heterotopia. In: Dehaene, M. and De Cauter, L. (eds.), Heterotopia and the City: Public space in a postcivil society. London & New York: Routledge, Taylor & Francis Group.

Principles of Heterotopias

by Michel Foucault, 1967. In: Of other Spaces. / Des espaces autres

1st principle:

Although there are many different kinds of heterotopias, Foucault distinguishes two types that are most important: - the heterotopia of crisis: sacred and forbidden places, addressing people in specific situations of crises (a type of heterotopia that, in our society, is slowly disappearing and is getting replaced by the second type: the heterotopias of deviation). - the heterotopia of deviation: addressing people that are different from accepted standards (e.g. a prison, a hospital, an elderly home, a psychiatric clinic).

2nd principle:

The function of a heterotopia is not necessarily fixed, but can evolve through the development and history of a certain culture.

3rd principle:

A heterotopia can contain multiple places at the same time, which are in fact not unitable. In that sense the heterotopia is a contradictory place (e.g. the cinema, the theatre, the garden).

4th principle:

The heterotopia exists in, contains, or produces its own ‘timezone’ (heterochronia). It is ‘connected to the borders of time’. A distinction is being made between the heterotopias of cumulative or endless time (e.g. the cemetery, the museum, the library) and the heterotopias of temporality (e.g. the marketplace, tourist villages).

5th principle:

Heterotopias need a system of entrances and exits, which borders and distinguishes it from its environment. This can be a physical system (gate, a bridge, a porch, a driveway) but it can also be non-physical in the form of a religious or hygienic ritual (e.g. washing feet before entering a mosque).

6th principle:

Heterotopias have a certain function in relation to their environment, that can shift between creating an illusionary place (e.g. the brothel) or creating a place of compensation (e.g. the colony).

creating a new intermediate space which is neither and both simultaneously. Additionally, it leads to creating sprawl, seclusion, and separated societies, while these embedded presumingly independent socio-spatial enclosures break the continuous urban and societal patterns. However, while it is easy to simply condemn gated communities as the ultimate evil of cities, it is important to also attempt understanding the adversary situation. Grbin highlights, again referring to Foucault's work, that

> *"we should also realise universal need for other spaces, as spaces where a cultural praxis or social need is being conducted away from this space, this society/culture, at last this world, this life, this reality."*[132]

The need for otherness and its consideration as part of an inclusive planning paradigm will reappear in the later discussion, but is tempting in order to neither think from the perspective of a simple pro-poor perspective nor romanticising reality and ignoring realities of safety issues which persist in cities around the world and again can hardly be judged by people in different circumstances.

Attempting to conclude and summarise the overview of power and space, Paul Routledge raises some of the most crucial elements: "Those vested with the power to produce the physical spaces we inhabit through development, investment, planning (and their antitheses) – as well as through grassroots embodied activisms are likewise vested with the power to perpetuate injustices and/or create just spaces."[133] Furthermore, he reminds that creating justice is a shared responsibility of all stakeholders in their socio-spatial systems[134] and introduces the importance of social struggle, as a fundamental element of "structuring and shaping social justice"[135] and finally concludes that public space can be seen as "a

132 Grbin, M., 2015. Foucault and Space, p. 310.
133 Routledge, P., 2009. Introduction: Cities, Justice and Conflict. In: Urban Studies 47 (6), p. 1168.
134 Bromberg, A., Morrow, G. D. and Pfeiffer, D., 2007. Editorial note: why spatial justice?, Critical Planning, 14, pp. 1–6.
135 Mitchell, D., 2003. The Right to the City: Social Justice and the Fight for Public Space. New York: Guilford Press.

gauge of the regimes of justice extant at any particular moment" and that public space is not only the scene of justice struggles but also where it is "implemented and represented."[136]

Or as Lefebvre concluded by trying to answer the question what space can be:

> *"Is space indeed a medium? A milieu? An intermediary? It is doubtless all of these, but its role is less and less neutral, more and more active, both as instrument and as goal, as means and as end. Confining it to so narrow a category as that of 'medium' is consequently woefully inadequate."*[137]

136 Mitchell, D., 2003. The Right to the City, p. 235.
137 Lefebvre, H., 1991. The Production of Space, p. 411

3 Four Views at Spatial Injustice

Building upon the preceding background of the study, how can the complexity of spatial injustice be done justice? Without claiming to have any complete answer to the question, this work attempts to provide an overview of the various constituents while also allowing for a better understanding of key elements and prioritising an equally perspicuous communication for diverse audiences. To achieve this, four lenses are chosen through which spatial injustice in the case of Kampala can be examined. Starting with the theoretical lens, a better understanding of preceding literature on the topic of mental and material manifestations of spatial injustice applied to Kampala is aimed for. In the following section – the historical lens – the history of Kampala is presented, once describing the line of events for the context itself, while also highlighting the implications of predominantly colonialism on the current situation and the prevailing barriers in the city and the minds of its residents. Thirdly, a spatial analysis shows the urban patterns of Kampala and highlights some of its tangible elements which affect the perception of injustice in one way or another. Lastly, in order to take the importance of injustice's individuality and intangible diversity into account, several human viewpoints are developed, trying to create a better understanding of the mental manifestations of the urban realm on different characters.

3.1 Theoretical Lens

Building mostly upon the conceptual background, the first part of this chapter wants to look at the particular context of Kampala through a theoretical lens by applying some of the ideas to more concrete examples. The focus will be on the connection to politics and democracy's role in the justice debate, as well as the interlinkage with capitalistic economic systems and their impact on increasing injustices. Lastly, the role of planning and participation shall be discussed further.

While the first of these issues are not directly spatial in itself, the background above should have shown the spatiality in political, economic and social discourses. Edward Soja further claims that incorporating spatial dimension in justice "can uncover significant new insights that extend our practical knowledge into more effective actions to achieve greater justice and democracy."[138] Building upon Soja's work, urban geographer Paul Chatterton highlights that this is even more important "in the light of deepening marginalisation, inequalities, precarity, social conflict and ecological degradation in urban areas."[139] While a strong focus of drivers in this sense is on class, race, and gender, Soja also emphasises that "their effects should not be reduced only to segregation."[140] Additionally to the spatial segregation, they can also have a profound impact on social dynamics, as well as political structures. Furthermore, Soja emphasises that the focus on studies of

> *"urban spatial causality has emerged to explore the generative effects of urban agglomerations not just on everyday behaviour but on such processes as technological innovation, artistic creativity, economic development, social change as well as environmental degradation, social polarization, widening income gaps, international politics, and, more specifically, the production of justice and injustice."*[141]

138 Soja, E., 2009. The City and Spatial Justice. In: Spatial Justice 1.1, p. 1.
139 Chatterton, P., 2010. Seeking the urban common: Furthering the debate on spatial justice. In: City 14.6; p. 625.
140 Soja, E., 2009. The City and Spatial Justice; p. 3.
141 Ibid.

Therefore, it is crucial to look at the different dimensions and explore where and how they are linked and affect each other, as well as which are the main drivers of urban injustices in order to find pathways which can counteract this development. In the first section, a more detailed consideration of the wider political environment in the city shall be produced, incorporating the concept of urban commons as an approach to understand as well as justify or even attenuate urban justice dynamics.

3.1.1 Democracy and Urban Commons

The political system has a profound influence on the built environment, social structures, as well as spatial justice itself. The ruling government decides upon planning approaches and master plans, regulates and defines the development priorities as well as allocating funds and selecting the responsible public representatives in the related institutions. Despite this more direct influence, elements like political liberty, freedom of speech, or rights of free assembly, and the presence and action of law enforcement influence how citizen use the urban space. Edward Soja states in this regard, that

> *"political organization of space is a particularly powerful source of spatial injustice, with examples ranging from the gerrymandering of electoral districts, the redlining of urban investments, and the effects of exclusionary zoning to territorial apartheid, institutionalized residential segregation, the imprint of colonial and/or military geographies of social control, and the creation of other core-periphery spatial structures of privilege"*[142]

Additionally, the egalitarian core principle of justice is basically also the foundation of a democratic structure. In the case of Kampala, or Uganda in general, the political system is officially a presidential republic which is built upon a democratic parliamentary system, as well as a multiparty system which is in place since 2005. However, the reality differs which

142 Soja, E., 2009. The City and Spatial Justice; p. 4.

becomes most clear under the consideration of Yoweri Museveni being the president since 1986 and elections being objected to significant critiques of falsified results. Furthermore, political opposition is heavily restricted and protests and demonstrations are often brutally ended.[143] Without delving much into the politics of Uganda, this environment is highly restrictive for political and societal emancipation and limits, for example, open critique or protests against segregative and unjust policies. Chatterton, referring to Bonefeld's work, highlights the importance of "struggles which are subversive and oppositional, but also transformative and prefigurative of possible, as yet unknown, urban worlds."[144] However, he also notes that

> *"tackling injustice requires not just successful attempts to mobilise against oppression, hierarchy and exploitation, although these are of course crucial. It also requires the generalisation of rebellion, cooperation and the common which can develop and advocate for new imaginaries and political vocabularies."*[145]

Therefore, in Kampala's case, two crucial elements for building justice are partially limited by the current political environment, which restricts both the crucial mobilisation but even more so the development and advocacy for new imaginaries and vocabularies. Concerning the latter, MacLeod and McFarlane introduced the topic of "Grammars of Urban Injustice."[146] They state that "perhaps grammar can be viewed as the infrastructure through which conceptual vocabularies are structured" and that they "emerge as both concepts and forms of practice: indeed they

143 First-hand experienced during stay in June/July 2018, shortly before the case of musician and political activist Bobi Wine (Robert Kyagulanyi Ssentamu) gained international attention. He led political demonstrations and represents mostly the highly unemployed, urban youth. He underwent allegedly torture through the government forces after his arrest and his return for a medical trip to the US was accompanied by a ban of rallies, processions and assemblies.
144 Chatterton, P., 2010. Seeking the urban common; p. 628.
145 Bonefeld, W., 2008. Subverting the Present. Imagining the Future. Insurrection, Movement, Commons. London: Autonomedia.
146 MacLeod, G. and McFarlane, C., 2014. Introduction: Grammars of Urban Injustice. In: Antipode 46 (4); pp. 857-873.

are as much about praxis as they are about debate over the merit of particular scholarly terms."[147]

This expressed need for discourse and an urban common as a starting point and element of social and spatial practice in order to tackle injustices has also been made by Paul Chatterton. For him the

> *"common at its most basic level is a commonly understood spatial motif, evoking bounded entities, which exist to nurture and sustain particular groups."[148]*

According to him, the common can be used as a political imaginary and vocabulary, as well as a "material aspiration and organising tool,"[149] which can formulate political messages from urban stakeholders which redefine and shape the urban realm. Chatterton, referencing Soja's work, claims that the quest for spatial justice can only be achieved if "embedded in a deep desire to (re)build the urban common"[150] and that it is a key tool to counteract spatial enclosures.[151] Furthermore, he describes the urban common as a – similarly to space – complex and adaptive element:

> *"Rather than a simplified, monolithic entity, the common is complex, and relational — it is produced and reproduced through relations weaving together a rich tapestry of different times, spaces and struggles."[152]*

In this (re-)production lies according to him a huge potential due to the "rich everyday life and dense patterns of sociality within the city"[153] which embraces the mutual and socially-induced formulation of commons, additionally to the creation of new political imaginaries.[154]

147 MacLeod, G. and McFarlane, C., 2014. Grammars of Urban Injustice, p. 858.
148 Chatterton, P., 2010. Seeking the urban common; p. 626.
149 Ibid.
150 Ibid.
151 Ibid., p. 627.
152 Ibid., p. 626.
153 Ibid., p. 627.
154 Ibid.

However, as stated before, Kampala's political and social environment seems to be largely restrictive in these processes and therefore creates a fundamental challenge in counteracting injustice – namely a mutual understanding, vision, and pathway which is built upon principles of justice and shared by both the civil society as well as planning practice and governmental institutions. Without this gist, no effective progress can be achieved.

This missing or at least insufficient shared idea of commons and political imaginaries, combined with the restriction of discourse thereof, leads to another risk for the future development of Kampala. Don Mitchell, a cultural geographer who widely writes about justice, rights, oppression and social struggle, raises in his book "The Right to the City: Social Justice and the Fight for Public Space" the risk of an emerging post-justice city and warns of

> *"a changing conception of citizenship which, contrary to the hard-won inclusions in the public sphere that marked the civil rights, women's and other movements in past decades, now seeks to re-establish exclusionary citizenship as just and good."*[155]

While his primal focus is the US American city, this seems in many ways already (or still) be the reality in many cities in sub-Saharan Africa, including Kampala. The segregation of different income groups and social classes, as well as the exclusion of certain groups from the planned urban realm, seems to be a widely accepted situation. While it is counteracted on a smaller scale by, e.g., upgrading and formalising previously mostly ignored settlements, it is generally justified by different needs and resources, as well as security concerns and is an integrated element of barriers of developments towards higher urban justice. Other authors

155 Mitchell, D., 2003. The Right to the City: Social Justice and the Fight for Public Space. New York: Guilford Press; pp. 181-182.

even go further and talk about "punitive neoliberal city"[156] and "punitive urbanism"[157] which both highlight the fact that

> *"orchestrator and defenders of a neoliberal urbanism punish and take revenge upon marginal urban groups, whether through incarceration or "interdictory" architectures and technologies."*[158]

These paradigms in the political-economic environment are often further accompanied with "outright violence and public intolerance: all of which can reframe the normative orders of policing and the legitimacy of who comes to represent "the public."[159] Once again a phenomenon which is heavily prevalent in Uganda's capital which is strongly influenced and structured by its capital investments and overall economic interest of the increasingly dominant and small urban and financial elite. Examples which were commonly mentioned in discussions with public and private stakeholders in Kampala were the motions towards different types of public transport which were intensively researched. However, several attempts of approving new policies, e.g., by restricting access of Boda Bodas[160] to the inner city centre to strengthen public buses or reforms of the bus transport sector in general, were blocked by high members of

156 Herbert, S. and Brown, E., 2006. Conceptions of space and crime in the punitive neoliberal city. Antipode 38(4), pp. 755–777; in MacLeod, G. and McFarlane, C., 2014. Introduction: Grammars of Urban Injustice; p. 861.

157 Cochrane, A., 2007. Understanding Urban Policy: A Critical Introduction. London: Sage; Dikeç, M., 2006. Two decades of French urban Policy: From social development of neighbourhoods to the republican penal state. Antipode 38(1), pp. 59–81.; and MacLeod, G. and Johnstone, C., 2012. Stretching urban renaissance: Privatizing space, civilizing place, summoning "community". International Journal of Urban and Regional Research 36, pp. 1–28; in: MacLeod, G. and McFarlane, C., 2014. Introduction: Grammars of Urban Injustice; p. 861.

158 Flusty, S., 2001. The banality of interdiction: Surveillance, control, and the displacement of diversity. International Journal of Urban and Regional Research 25, pp. 658–664; in: MacLeod, G. and McFarlane, C., 2014. Introduction: Grammars of Urban Injustice; p. 861.

159 Minton, A., 2009. Ground Control: Fear and Happiness in the Twenty-First-Century City. London: Penguin; and Staeheli, L. and Mitchell, D., 2008. The People's Property: Power, Politics and the Public. New York: Routledge; in MacLeod, G. and McFarlane, C., 2014. Introduction: Grammars of Urban Injustice; p. 861.

160 Small motorcycles which are the most common type of transport in Kampala.

the parliament which are allegedly highly involved in the transport business themselves. Additionally, corruptive practices are very common and maintain a strong political power of the high-income society of Kampala.[161]

Introducing the focus of the following sub-chapter, Fainstein states about the connection of democracy and economy in the field of justice:

> *"While democratic states can tax and redistribute, they remain always susceptible to the hierarchy of power arising from capitalist control of economic resources. When pressed, advocates of deliberative democracy will admit that it operates poorly in situations of social and economic inequality and contend that background conditions of equal respect and undistorted speech must be created in order for it to function well."*[162]

This statement raises several issues. Evident is that a widely shared understanding of urban commons is crucial, as well as some basic rights and principles – all only existing in a limited degree in Kampala. On the other hand, it can also provoke the question if neoliberal capitalistic democracies – widely enforced and diplomatically expected by Western countries in largely different socio-cultural settings – can solve the problem altogether or if the widely preached principles of free markets, privatisation, etc. might not be the right pathway towards a just urban society?

161 Despite some public cases and overall comparitive corruption indices, there is little prove to this claim. It was however repeatetly mentioned as a normality and unchangeable facts in interviews with both sides including high-ranking governmental representatives and members of some of the richest families.
162 Fainstein, S., 2009. Spatial justice and planning, p. 1.

3.1.2 Capitalism, Economies and Justice

Continuing the discussion of the financial environments in cities, Fainstein claims that "capitalism necessarily continuously reproduces inequality."[163] Soja supports her statement and adds that, regardless of the existence of strong spatial segregation,

> *"redistributive injustice is aggravated further by racism, patriarchy, heterosexual bias, and many other forms of spatial and locational discrimination."*[164]

Sharing the same critique, Chatterton focuses on the importance of the common in times of privatisation, environmental degradation of available urban space, and increasing wealth accumulation, as "a political byword for resistance against the excesses of contemporary capital encroachment and expansion."[165] Therefore, a few key messages in regard to the economic dimension of cities can be drawn: 1) The economy is interwoven with the political system and has a direct influence on justice; 2) Neoliberal capitalism leads to increasing injustices, mostly in crucial and life-threatening forms in resource-poor environments with limited rights and fundamental personal freedoms; and 3) Societal emancipation and (re-)formulation of the urban common are crucial to create agency against dominating economic interests and all forms of private actions which harm the livelihood of the larger society.

163 Fainstein, S., 2009. Spatial justice and planning, p. 3.
164 Soja, E., 2009. The City and Spatial Justice; p. 4.
165 Chatterton, P., 2010. Seeking the urban common; p. 627.

3.1.3 Participation and Societal Discourse

This leads to the last section of the theoretical lens, which wants to look at how the aforementioned participatory and communicative environment can be reached or supported. Fainstein rises the general importance of participatory involvement in planning processes. Most importantly, in the case of developed areas, the target population but also the broader affected city-wide population need to be involved, while for new developments "there should be broad consultation that includes representatives of groups currently living outside the affected areas."[166]

However, while there is a broad consensus on the importance of participatory planning practice in today's professional world (however, not necessarily in the actual global institutional processes), Fainstein and Nussbaum both raise an issue which was already briefly discussed before: The risk of participants whose opinion is restricted or adversely affected by their socio-traditional environment as well as their uprising. This is crucially important for minorities of certain under-represented or marginalised societal groups like women, youth, ethnic, or people with less formal education. Fainstein states that "genuine democratic deliberation requires background conditions of equality"[167] making justice partly a prerequisite of a crucial process to reach justice – and leads to both a self-reinforcing and restricting element of injustice. Therefore, Fainstein's call for participation is based upon an "ideal speech situation [which] assumes a world without systematic distortions of discourse, governed by rationality."[168] Hence, participation – without attempting to question its overall importance in urban practice or justice issues in particular – must always be applied carefully and under the restrictions which socio-cultural injustice embodiments might bring along. For some issues, participation might not lead to the aimed for objective of reducing injustice and can even reinforce it by following historically evolved paradigms. Therefore, technocratic approaches which focus on less subjective properties could sometimes be better and necessary to counteract injustices and

166 Fainstein, S., 2009. Spatial justice and planning; p. 11.
167 Ibid., p. 2.
168 Ibdi., p. 3.

be chosen over participation. As Fainstein states, “social justice must take both [participation and technocratic approaches] into account, it is my contention that just outcomes should trump communicative norms when the two conflict.”[169]

Additionally, there is another dimension which challenges participatory practices. In order to openly discuss and express one’s opinion, freedom of speech which goes further than the legal regulations is crucial. In the case of Kampala, this can manifest itself in various ways. The most common one concerns gender roles. While women gain continuously more rights, these rights do not equal perceived freedom to speak up. Culturally, men are dominating the decision-making processes, and gender roles are firmly implanted in society. This means that even if women are invited to participate and legally free to express their opinion, there is a significant gap between equal and unbiased expressions of interests. While this is difficult to eradicate, it can be counteracted and its impact decreased through awareness building, emancipatory education, as well as formats like gender-divided focus groups which decrease the male dominance in public events. Another layer is the age. In many countries in sub-Saharan Africa, including Uganda, prevails a strong respect for the elderly which can easily lead to under-representation of the opinions of the youth – which is, however, the largest group of the society. Similarly to the culturally embedded gender-roles, this challenge can be approached in a similar manner to at least minimise its impact on distorted participation. Another extreme and Uganda-specific example is for people of the LGBT community which are strictly forbidden in Uganda and therefore makes any kind of emancipation or true participation impossible.

Finally, a few conclusions shall be made: “The three hallmarks of urban justice – material equality, diversity, and democracy – are not automatically supportive of each other and, in fact, in any particular situation, may well clash or require trade-offs.”[170] Furthermore, neoliberal capitalism can

169 Fainstein, S., 2009. Spatial justice and planning, p. 4.
170 Ibid., p. 5.

challenge efforts to reach more just cities, while effective participation has certain prerequisites and cannot blindly be taken as the correct form while technocratic decision-finding processes might sometimes be the right way instead. However, also in the case of Kampala, by focusing on "the critical spatial reflection, de-neutralising spatiality, recognising the socio-political nature of spatial construction,"[171] it can become possible "to reverse a century and a half of relative neglect of spatial thinking"[172] and build the foundation for a pathway towards less injustice.

171 Soja, E., 2010. Seeking Spatial Justice. Minneapolis, University of Minnesota Press, p. 14.
172 Ibid.

Fig. 15: Africa after Berlin Conference 1885

Swanston Map Archive Limited

3.2 Historical Lens

A significant percentage of today's global as well as local injustices resulted from decades or centuries of societal, political and cultural developments. In most capitals of sub-Saharan Africa, the leading cause was often the duration and aftermath of the colonial rule – in the case of Kampala from Great Britain.[173]

The African continent beneath the Sahara began to be explored and afterwards exploited mainly during the 19th century despite some coastal regions which were 'discovered' earlier, mainly by the Arabs. In most of the landlocked regions, missionaries and explorers started to set up religious missions, build trading relationships or study the societies and environments. While this process was often accompanied by armed conflicts, it was initially also frequently initiated by presumingly mutually beneficial agreements between the local communities and the colonising parties. Despite initial trade relations, the relationship often shifted

173 Acey, C., 2007. Space vs Race: A Historical Exploration of Spatial Injustice and Unequal Water in Lagos, Nigeria.

Fig. 16: Illustration of Berlin Conference 1885 by Adalbert van Rößler

Allgemeine Illustrierte Zeitung, p. 308.

towards a more powerful position of the colonial powers, accompanied by exploiting the natural resources and local markets, while mistreating and heavily restricting the rights of members from the local communities – often in cooperation with local authorities who benefited disproportionally as well. Furthermore, the power was constantly expanded and led to most of the African continent being under colonial rule and the division into countries and protectorates (fig. 14) during the Berlin Conference in 1884-85 (fig. 15). It took until the mid of the 20th century for the majority of colonised countries in SSA to develop a sufficiently strong agency to move towards independence while during the same time also in the Western world more awareness grew, leading to increasing societal criticism as well as improved policies for the local societies. However, during the periods of colonialism, the foundation for many prevailing injustices was set. These range from racial segregation, today often continuing by income-class segregation, defining unsuitable areas for African residential areas, limiting access to certain services, places or during defined times, to favouring and politically supporting certain ethnic groups, which led to many conflicts, for example the genocide in Rwanda, and still impact societal structures across the continent. Furthermore, Western planning paradigms were imposed in the initial planning approaches and later by teaching them in the educational institutions – also still ongoing. There is no way of showcasing the multiplicity of consequences of colonialism on today's societies and cities, but its acknowledgement is still fundamental.

But also after the independence movements, the influence of the Western world always continued, in various ways with different objectives – ranging from political (establishing supportive countries during Cold war), economic, religious, to benevolent ones. At the same time, many African governments struggled to build functional political structures according to the Western model and raised expectations and in some cases still continue to do so. This lead to various armed and non-armed conflicts between countries, ethnic groups, political ideologies etc., which still shape the societal structured and led to manifold grievances, made room for widespread corruption and power-dynamics which suppress certain parts of the population for various reasons and hinder a prosperous de-

velopment in endless ways. In order to provide some more detailed exampled, in the following, a brief timeline of events of Uganda attempts to give an overview of the general development of the country in the last 150 years, combined with the various steps which led to the structural shape of Kampala 's historical development[174].

The Western impact started in 1877 when the first mission was set up by the Church Missionary Society at Natete, followed by the French Catholic White Fathers mission two years later at Kitebi between Rubaga and Lake Victoria. In 1884, the Buganda king Kabaka Mutesa I passed away which led to the Kibuga, the Ganda expression for city, to be moved from Rubaga to Mengo. One year later, the Roman Catholics were given a site on the southern slopes of Rubaga and moved five years later to the hilltop where they are still today. In 1889, the protestant Church Missionary Society was given the permission to establish their base on a site on Namirembe hill. After the various missions initiated the Western influence in the Buganda kingdom, Captain Lugard from Britain, who played a significant role in the colonisation in various parts of the world, set up camp on Kampala Hill in 1890. The name of today's capital – Kampala – literally means the place of the Impala. This particular type of antelope was under the Kabakas grazing on the slopes of Kampala Hill, which still forms today the Old Town of Kampala. Just two years later, in 1892, the first Arab settlement was established in Natete. In 1893, the colonial administrative headquarters shifted from Kampala to Entebbe in 1893, the supporting secondary city in the hinterland of Kampala closer to Lake Victoria which still houses the biggest national airport today and became globally famous through being the scene of the abode of Israeli hostages and the aeroplane crew by pro-Palestinian militants in 1976.

Seven years later, in 1900, the Buganda kingdom made an agreement with Colonial Britain. Leading to the creation of crown (later Public) land

174 If not stated otherwise, source of timeline: Omolo-Okalebo, F., 2011. Evolution of Town Planning Ideas, Plans and their Implementation in Kampala City 1903-2004. Makerere University, Kampala and Royal Institute of Technology, Stockholm: Doctoral Thesis in Infrastructure, Planning and Implementation. Available at: https://www.diva-portal.org/smash/get/diva2:466031/FULLTEXT02.pdf [Accessed 14 April 2018].

and mailo land (freehold), it still heavily influences the land markets today. Simultaneously, the pacification of the rest of Uganda started. Through the agreement, Kampala started growing as two cities: The indigenous capital of the Buganda Kingdom, Mengo (fig. 17), and Kampala, the colonial capital. Despite the following events, the Baganda did not see the developments as being conquered or ruled, but to reach better 'protection' through Great Britain.

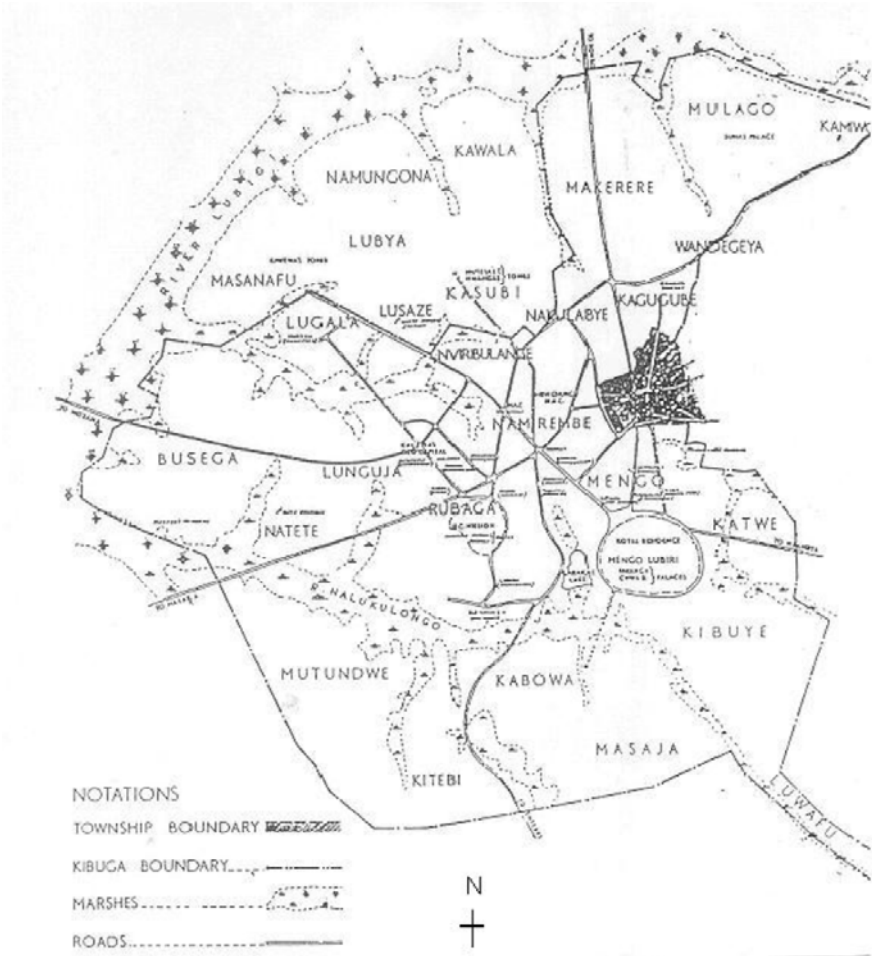

Fig. 17: Dark spot shows Kampala Township in 1902 in relation to the Kibuga

Prabha 1993, in Omolo-Okalebo, V., 2011. Evolution of Town Planning Ideas.

In 1902, the colonial Kampala had a size of approximately 70 hectares, which was meant to be "exclusively as a European quarter and all native settlements [were] strictly prohibited."[175] Along with the demarcation, a regulation was established which stated that "no person shall use the streets of any town or area to which these regulations may be applied between the hours of 9 p.m. and sunrise, unless he (sic) carry a light"[176], a regulation which similarly existed in the Kibuga are, with the same intention of maintaining control of the population. In the same year, the Uganda Townships Ordinance provided the first legal framework for urban development. It gave the Commissioner the right to declare any place in the Protectorate to be a township – a decision which the Buganda government protested against because they saw it as another step of the size of their Kibuga being reduced. Furthermore, it declared that no private building should be built on Government Square to leave space for upcoming government buildings. The space is today called City Square and is situated along Kampala Road. It can be seen as the first time zoning happened in Kampala. In 1906, a new boundary was set for Kampala as a 4.8 KM (3-mile) radius from "present Nakasero Fort" (Old Kampala). Additionally, the Kampala Local Sanitary Board was initiated and appointed as the authority for urban administration in the Kampala Township Area. A few years later, in 1912, the first Planning Scheme for Kampala was created (fig. 18), followed one year later by the establishment of the Town Planning Committee. At that point, the population was about 2,850 in an area of 570 hectares, while the population of the Kibuga was over 32,000.

As part of the new direction of spatial planning, public health expert Professor Simpson was invited to analyse Kampala and provide recommendations, which he officially released in 1915. The recommendations highlighted the necessity to secure development along health lines; to protect the present water supply and the substitution as soon as possi-

175 Lubega, H., 2015. The kibuga: Buganda's lost capital. Daily Monitor, 22 March 2015. Available at: https://www.monitor.co.ug/Magazines/PeoplePower/The-kibuga--Buganda-s-lost-capital/689844-2661446-a12abq/index.html [Accessed 13 January 2019].
176 In: Omolo-Okalebo, F., 2011. Evolution of Town Planning Ideas, Plans and their Implementation in Kampala City 1903-2004, pp. 195-196.

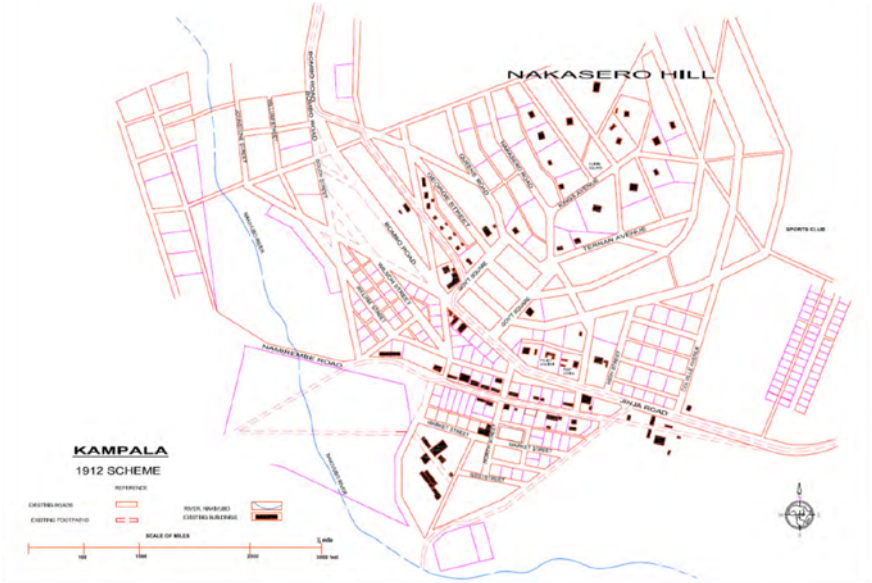

Fig. 18: First Planning Scheme for Kampala Township 1912

Kendall 1955, redrawn by Omolo-Okalebo, V., 2011. Evolution of Town Planning Ideas.

ble of a public through water supply from Lake Victoria; the drainage of marshes; the systematic examination of rats to avoid plagues, and the establishment of an infectious hospital and a properly equipped observation camp; and lastly, the structuring into plots of 15 x 30 m with no right to subdivide. Additionally, he recommended the physical separation of Europeans, Indians and Africans through green belts that neither could build on for health reasons.

For the implementation of Simpson's guidelines and to support the previously set up board, in 1918, the Central Town Planning Board was established to coordinate and advise the development and growth of Kampala and other urban areas.

In 1928, the Busulu and Envujo Law was passed, which formalised the respective rights of landowners and tenants of mailo land, including landlords' rights of eviction and tenants' rights of succession. One year later, British planning consultant A. E. Mirams was invited to develop growth scenarios for Kampala, while the colonial area grew to more than 1,300 hectares. One year later, the railway reached Kampala and Kololo, today

home of many international organisations and embassies in the centre of the city, was incorporated. At the same time, Mirams delivered a physical plan for the city centre which acted as the structural direction for Kampala (fig. 19). This initiated the development of a planned civic centre, a policy of dividing residential, commercial and industrial functions and the drainage of the swamps (fig 20). In 1931, the Kampala Township Boundary Sanitary Rules were put into force while also the Kibuga introduced the Baganda Township Sanitary Law, being the first urbanisation policy by the kingdom. In 1938, Kampala further grew through the inclusion of Makerere, today's location of the university, as well as Wandegeya and Mulago. This led to a growth of the urban area to 1860 hectares until 1944.

Kampala sprawled further to the east between 1944 to 1954 by adding more planned residential and industrial zones. European residential areas formed on the slopes of Nakasero and Kololo in the 1940s. At the same time, the area around Kira Road became an Asian residential area. The colonial government also wanted to expand on Makerere hill, which was

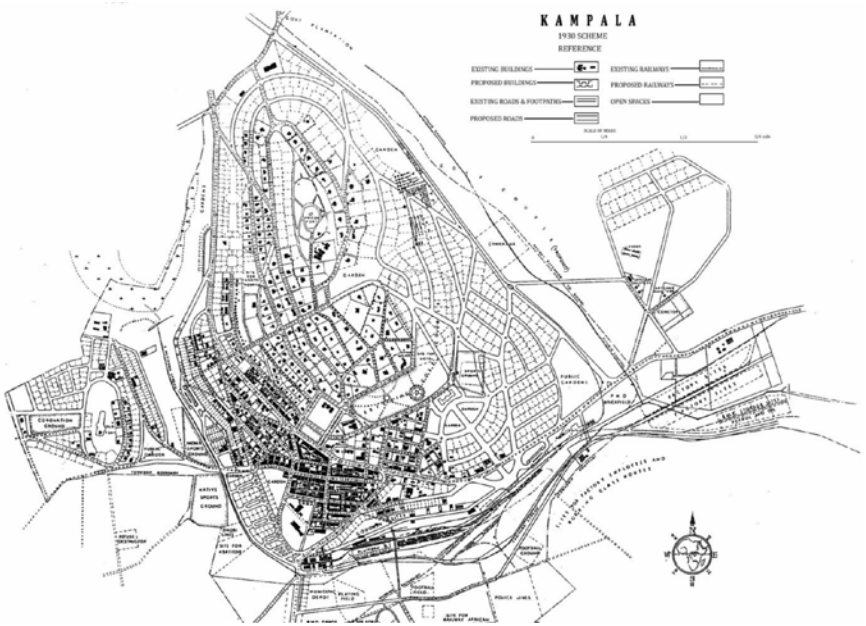

Fig. 19: Mirams' scheme for Kampala in 1930

Kendall 1955, in Omolo-Okalebo, V., 2011. Evolution of Town Planning Ideas.

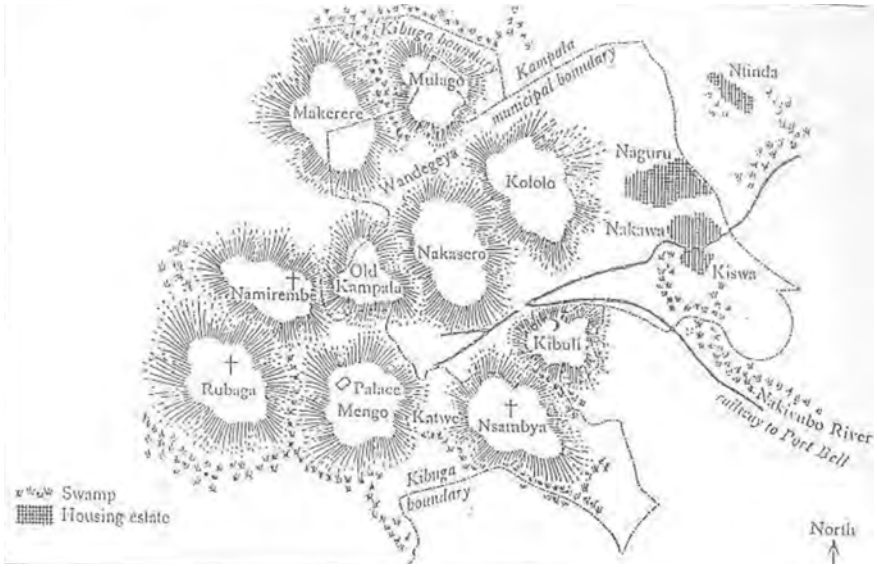

Fig. 20: Central hills of Kampala 1949
Adopted from Aidan Southall and Peter Gutkind 1957, in Omolo-Okalebo, V., 2011. Evolution of Town Planning Ideas.

met with protest from landowners, tenants and politicians to oppose the rising European control of the Kibuga. Also in the mid of the 1940s, the new Development Plan first incorporated the consideration of housing for Africans and their right to urban space (fig. 21), while the Kingdom passed the Baganda Town Planning Law and set up a Town Planning Board for the Kibuga. The new law required that for any new building the approval of the Board is necessary.

A bit later, in 1948, the previous colonial Central Town Planning Board was replaced by the Town and Country Planning Board which guaranteed more rights to review planning decisions from the various urban authorities. Furthermore, the Town and Country Planning Ordinance enabled the governor to define any area as a planning area in consultation with local authorities. By that time, Kampala's population reached 24,198. In 1949, Kampala was established as a Municipality and in the following three years the Nakawa and Naguru estates became the first African residential estates in Kampala. During the same time, the Kampala Outline Scheme (fig. 23) was developed by the Town and Country Planning Board to integrate the fast population growth and urban expan-

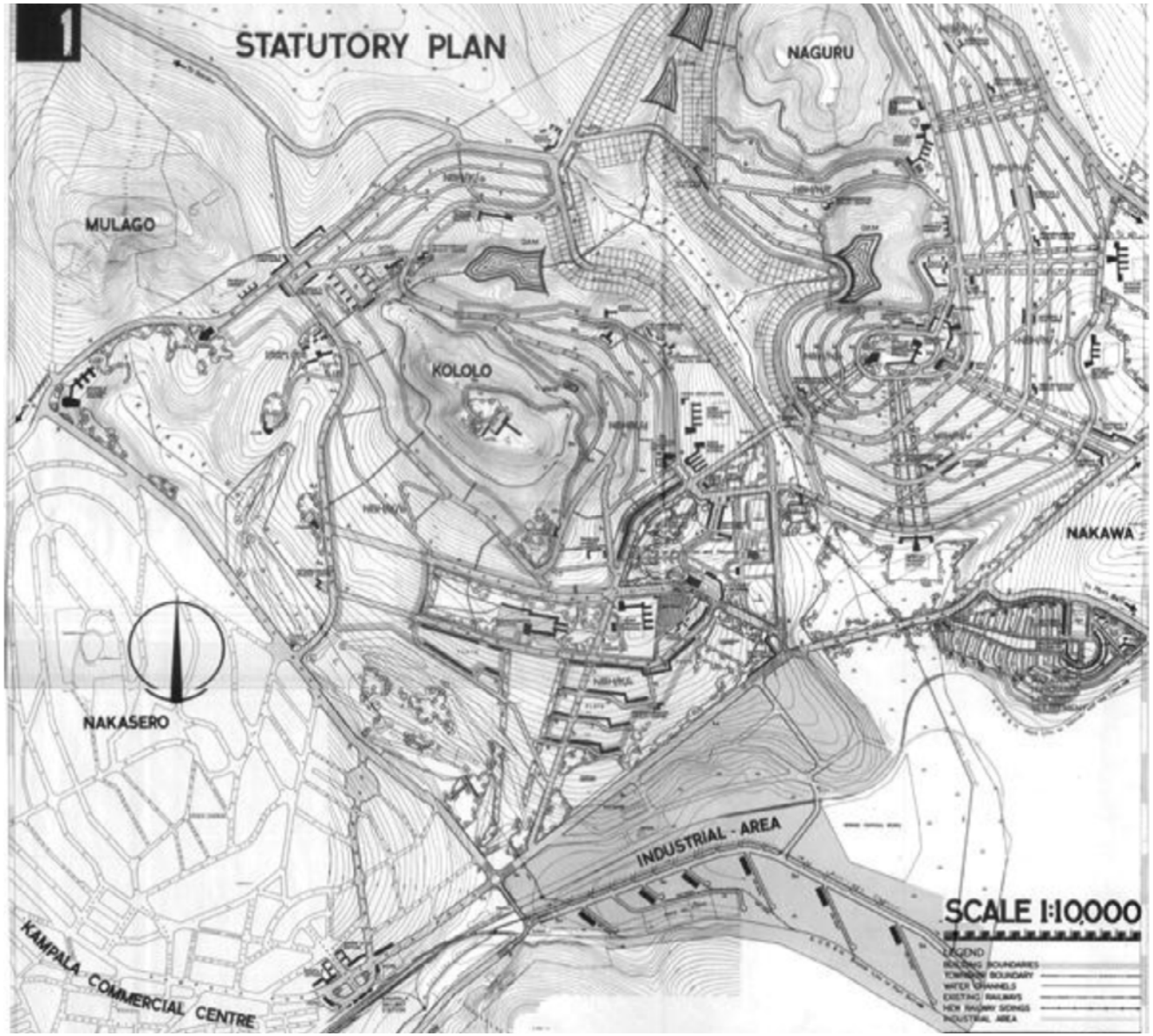

Fig. 21: Statutory Plan of Kampala Extension 1947 incl. Naguru and Nakawa

May 1947, in Omolo-Okalebo, V., 2011. Evolution of Town Planning Ideas.

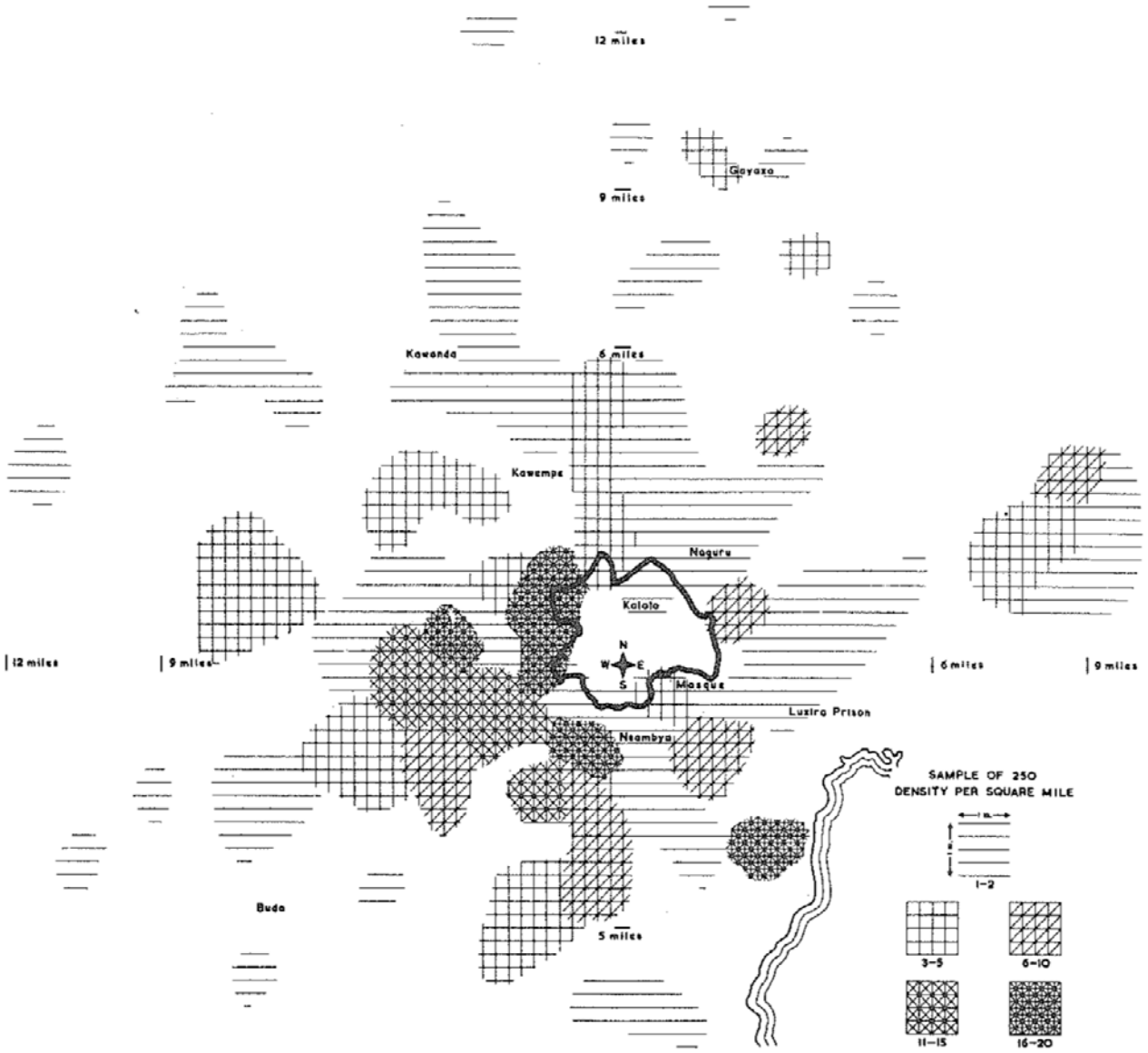

Fig. 22: Peri-urban Kampala, defined by houses of African clerks

Munger, E. S., 1951. Relational Patterns of Kampala Uganda.

sion since Mirams' plan two decades earlier (fig. 22). In 1954, the Government introduced the first Policy on African Housing and established a department to African housing needs. Between 1954 and 1962, Kololo and Mbuya developed as European residential areas which remained the same until after the independence.

In 1959, a census counted 46,735 people (African and non-African) inside the city boundaries of Kampala, covering approximately 2175 hectares. The Kibuga, on the other hand, covered an area of about 5180 hectares with 52,673 residents. The combined population of the townships Nakawa and Kawempe and the Kibuga and Kampala was approximately 123,000. Between the years 1958 and 1968, four municipalities existed with their respective administrative bodies: Kawempe (1958-68), Mengo (1962-68), Nakawa (1963-1968), and Port Bell (1958-63).

On October 9, 1962, Uganda gained its independence and Kampala became the capital of Uganda. The Kibuga was constituted into the Mengo Municipality and also Namirembe was added to Mengo. Simultaneously, the Public Lands Act passed. In 1964, the revised Town and Country

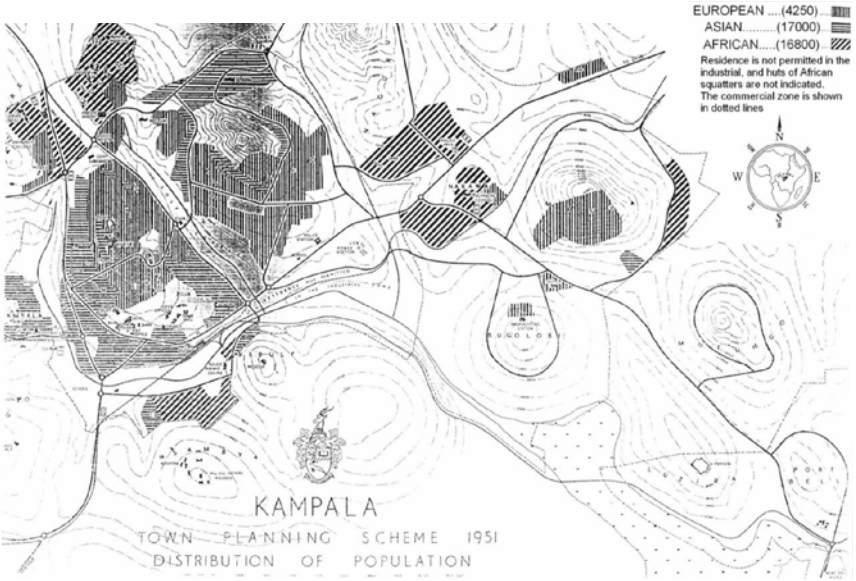

Fig. 23: Henry Kendall's 1951 Town Planning Scheme for Kampala showing residential areas of different ethnicities
Kendall 1955, in Omolo-Okalebo 2011

Planning Act passed, which is the current legal document on urbanisation directives. The Public Health Act and the Urban Authorities Act were also revised in the same year, while the Urban National Housing Corporation was established as a subdivision of the Ministry of Works. In the years 1964 to 1966, the United Nations Kampala-Mengo Regional Planning Mission was carried out in Uganda in order to analyse and recommend on various aspects of regional planning.

In 1965, the population of Mengo and Kampala combined was estimated to be between 170,000 to 180,000 as a result of ongoing and increasing population growth. The royal Kabaka of Buganda, as well as the other monarchies, were overthrown in 1966 by Milton Obote, the Prime Minister at that time. This led to the incorporation of the Kibuga into Kampala Municipality with Kampala City Council as the administrative unit. Two years later, the size of the city of Kampala increased from 21 square kilo-

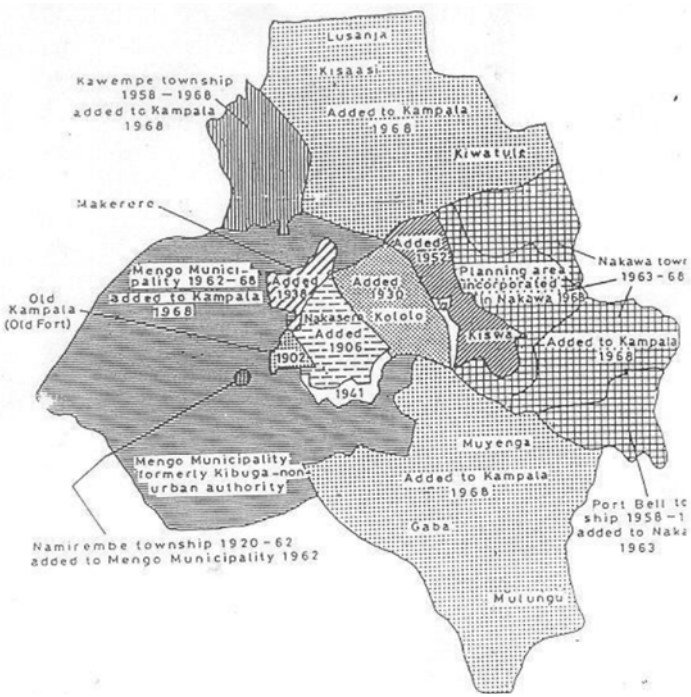

Fig. 24: Post-independence extensions and structure of Kampala
Source unknown, in: Omolo-Okalebo 2011

metres to 195 square kilometres with the inclusion of Kawempe, Lusanja, Kisaasi, Kiwatule, Muyenga, Ggaba and Mulungu.

The development of Uganda was severely disrupted in 1971 when Idi Amin, a former high-ranking military official in both the British and then Ugandan military forces, executed a military coup on January 25 while president Milton Obote was outside the country. This event initiated an eight-year-long military dictatorship with an estimated death toll of up to 500,000 people – mainly members of opposition groups and other ethnicities than his ethnic group of the Kakwa. One action which influenced mainly the commercial and ethnic structure of Kampala, was the expulsion of approximately 80,000 South Asian (the majority being Indians with Gujarat descent) and the nationalisation of their property in order to give it back to ethnic Ugandans. This led to significant challenges in the functioning of the economic system and was partiallly reversed when Yoweri Museveni – today's president – took power in 1986 and called it a major mistake.

Despite the political unrest, the 1972 Development Plan for Kampala (fig. 23) was adopted in 1974, extended by Idi Amin in 1975 through the Land Reform Decree which abolished freehold and nationalised all land in the country with permitted leaseholds of 199 years for public bodies and religious institutions and 99 years for individuals. However, the law was neither really implemented nor enforced. In 1980 after various conflicts and growing resistance, the National Resistance Army (NRA) declared war, which started in 1981 and after years of armed conflicts led to their control in 1986. This led to an economic rehabilitation starting in 1989 through a Structural Adjustment Program, Economic Liberalisation and increased foreign investments. At the same time, plans for investment parks were made, which led to further Foreign Direct Investment (FDI), as well as privatisation of public properties including housing, and the establishment of the National Housing Strategy. Furthermore, the development was strengthened through fiscal and taxation policies for reduced prices on construction materials.

A census in 1991 counted a nighttime population of 774,241 inhabitants

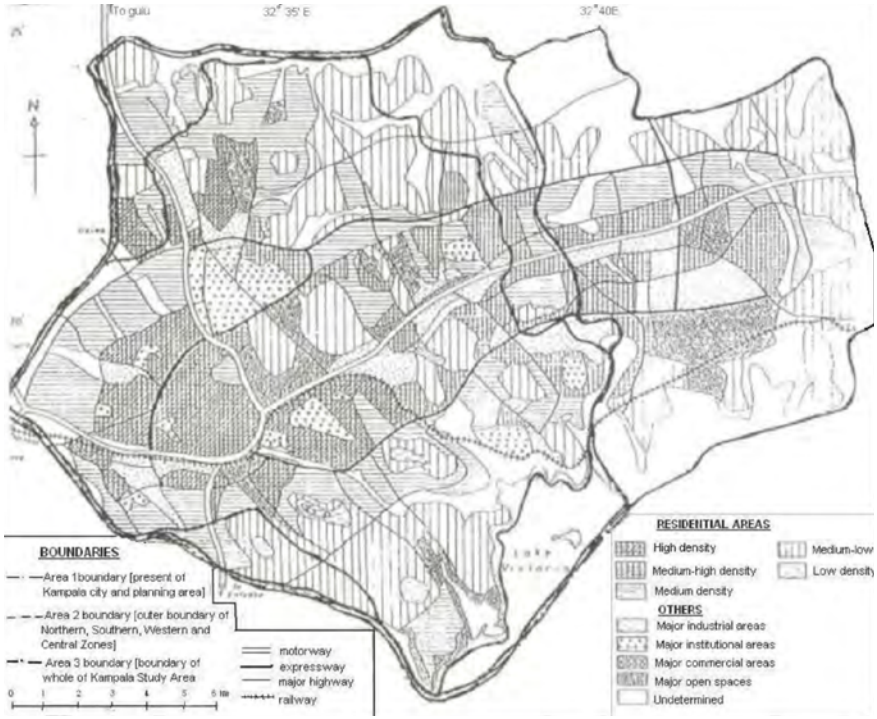

Fig. 25: Kampala Development Plan 1971
Kampala City Council 1972, in Omolo-Okalebo 2011

residing in an area of 195 square kilometres. Starting one year later in 1992 to take the continuous growth into consideration, a new Structure plan for Kampala's urban development from 1994 to 2004 was prepared by the consultants John Van Nostrand and Associates Ltd of Toronto, which was completed and enforced in 1994. In the same year, the Ministry of Health declared the Nakawa and Naguru estates as unfit for human habitation leading to a series of events and resulting finally in the largest eviction in Kampala in 2011 leaving a majority of over 1,500 tenants homeless. In 2007, the Government selected Opec Prime Properties to re-develop the land occupied by Nakawa-Naguru housing estates into a modern satellite town at $300m, including the construction of low-cost houses/apartments – a process which put on hold due to disputes. However, in 2011, the eviction was carried out by the UK based company Opec to make room for the new developments.

Despite the negative events, several planning related courses were introduced at the Makerere University, still today a leading academic institutions in the region. In 1995, a course of Physical Planning is introduced in the Faculty of Technology, which was run under the German Technical Corporation (GTZ, today GIZ) Sponsorship. The course was followed up by an Urban Planning Course in 1997 in the Department of Geography, Makerere University. One year later, the Uganda Institute of Physical planners is started in the Department of Physical Planning of the Ministry of Lands Water and Environment.

In 2006, the Physical Planning Department was set up under the new Ministry of Lands, Housing and Urban Development, under which Planning becomes a directorate. In 2010, the new Physical Planning Act was introduced, followed by the Land Acquisition Bill in 2016 to amend the Land Acquisitions Act from 1965 to allow for compensations in the case of planned government projects.

Following this brief overview, I want to discuss how some of the historical events, mostly planning-related ones, have an impact on the spatial injustice which prevails in many ways till today. These can be narrowed down to three categories: 1) Spatio-structural planning decisions; 2) Segregative spatial policies and practices; and 3) mental remnants of the past's two-class society.

Regarding the first category, a few events shaped significantly the urban fabric of Kampala today. The first was the long-standing division between the colonial capital and the kingdom's residence. While no clear boundaries of both parts can be distinguished toady, their planning is still visible. In the previous colonial settlement, plots were (and are still) larger with a strong division between different functions such as residential, administrative, and commercial. These areas are mainly today's Nakasero and Kololo hill. The first is today's commercial and administrative headquarters of Uganda, housing the parliament, most ministries, as well as high-class hotels and some embassies. Kololo still has a prevailing residential character for the high-income classes, while it also contains some ministries, international organisations, as well as fine-dining establishments.

The former Kibuga of the Buganda kingdom covered most of nowadays Namirembe, Bakuli, Kisenyi, Mengo, and most important Lubiri, which still houses the royal Kabaka's palace and is the official residence of the 36th Kabaka king – Ronald Edward Frederick Kimera Muwenda Mutebi II – who is representing the kingdom with a history of over 700 years. While the Lubiri as the kingdom's centre has not changed much, the other areas became 'Old Kampala' which is a densely built area with many shops, markets, the central mosque as well as offices and smaller commercial institutions. These three areas – 'Old Kampala', the business and administrative city centre, and Kololo – together form the centre of Kampala today and each have a very distinct character and cater for completely different groups of the society. Surrounding them are various areas with mainly mixed use for different income groups, which, however, do not showcase the same scale of inequality.

Additionally to the division between the former kingdom and colonial settlement, the structure plans of the first half of the last century still have an immense impact. The structure plans were until dependence only made for the colonial area and put a strong focus on the exclusion of the ethnic Ugandan population, as well as the separation between different ethnic groups. In an article which was published online from an Ugandan city guide, which caused a lot of public discussion and has since then been taken down, pointed out the division being focusing on the European residential and administrative areas in the centre (Kololo), surrounded by a kind of buffer of Asian-led commercial functions, and the African workers settlements and royal settlements outside. This initial structure was further enforced by the decision of creating a 'green belt' around the European settlement in order to avoid the 'spreading of diseases'. From the latter, today only the golf course if left; however, it led to a very elitist character in Kololo and a strong spatial gap between the surrounding. Today, this division is still highly visible by having the high-income residential area and administrative and commercial centre as highly secured and inaccessible places. While Kololo main population, as well as the segregative policies, today are not built upon ethnic groups but income, still prevail and push all of the centres for the middle- and lower-income

groups to the outer areas.

Furthermore, and most importantly, Kampala is built on a range of hills with most of them being home to one of the functions which are considered important – ranging from the high-income settlement to religious institutions, the university, the royal palace, or a military base. On the other hand, the settlements for the Ugandan workforce has since the beginning been located in the lower areas, which together with some illegally occupied areas, form the areas most at risk of flooding which happen on a regular basis and are a serious threat to the population, livelihood as well as property. While there are nowadays also low-income areas in non-risky areas, the majority is located in the most flood-prone areas and was strategically planned in both historical planning practice and documents. A more detailed look on the flooding issue, as well as the overlap with the historical ethnic division, will be done in the next lens of the spatial dimension.

Furthermore, until the 1940s, African were not allowed to settle in the European areas and either needed to live in the mostly unplanned royal enclosure or in specifically created workers settlements (Nakawa and Kawempe) which already in the past had significantly worse living conditions and continue mainly to do so. Hence, despite the direct spatial segregation, the African people (who made up a significant percentage in the European businesses and residences, were mostly not accounted for and when their areas were finally incorporated a few years before the independence, they were located in the least suitable conditions. While the royal, colonial, as well as the surrounding areas, were all incorporated in the new plans after the end of colonialism, the focus continued to be on the higher-income and middle-class areas also in the central post-colonial planning document in 1972, with a prevailing strong ignorance of 'self-planned areas' of the urban poor. While this slightly changed in the next plan in the 1990s, the latter plan did not lead to any significant actions which would have improved the livelihoods in these areas. This neglect of official planning institutions continued well into the current century and is just recently reversing since the set-up of the new municipal planning

institution (KCCA, Kampala Capital City Authority) which focuses on upgrading, basic service provision, and formalisation initiatives but does not has the capacity and resources to revert a century of ignorance.

Lastly, the historical development – most importantly the colonial period and the following dictatorship as well as numerous armed conflicts inside the country and along the borders of Uganda – can be felt in various ways but is impossible to quantify. Some of these aspects will reappear in the last, human lens; however, some of the examples which seem to be most relevant from an external perspective shall be given here. A very strong narrative, often repeated mostly by the older generation, is the hardship which the country went through and the progress which has been made since – also in positive connection to the president. While this is surely correct compared to the past, it appeared frequently to be an excuse to not question the present. Another dimension of it is the apparent acceptance of injustice as being a normal part of life. Primarily people who grew up during the colonial time are somehow accustomed to be less 'important' and accept their position, are very far away from any kind of political uprise or serious questioning of the current situation. These are, however, very personal and scientifically unsupported observations, which shall not be understood as anything else. And even more importantly shall not diminish the hardship many people went through and still go through or give the impression that it would be easy to change the current position in the given circumstances. Nevertheless, most of the activism which questions the Status Quo comes from the young and struggling population, already today heavily impacting the societal and political environment. And will most likely lead to major changes in the coming decade, despite the already countless smaller transitions Kampala is going through (e.g., through strong will and capacity in the KCCA). One last issue – which is even more difficult to discuss unbiased from my perspective – is the article about the colonial past and its influence on injustice in Kampala today which was mentioned before. While the referred to article blamed colonialism for many of today's problems, it caused a vivid discussion mostly young Ugandans who called for taking the responsibility for today's and tomorrow's situation and not continuing to blame others and

the past for everything. And that a lot of problems were caused in the post-colonial period as well which nobody than Kampala's administrations can be blamed for either. This critique sometimes extends as far as criticising the 'African-colonised' mentality which still prefers to blame previous events and prefers to rely on help instead of finding prospective solutions for the present. Despite my strong emphasis on colonialism's hugely negative impact which should neither be forgotten nor forgiven, the perspective of dealing with the current moment without searching for excuses in the past, is in my opinion a highly promising approach and, according to my impressions, rising in the younger Ugandan population. And this also works in the other direction. Richard Sennett commented in a recent talk[177] to a question about cultural sensitivity from the audience, that – while it took him many years himself – people need to get over their feeling of guilt in order to progress. While not completely agreeing, the comment made me think and a reality in which the past is not forgotten but does not influence the current way of working sounds quite a bit more progressive – more than the reality which is often highly influenced by accusations, overly careful political correctness, recriminations, and too diplomatic discourse.

In order to move back to the initial focus and to avoid fully neglecting the importance of the before-written, it is important to understand where Kampala came from, what shaped it until today, and how many injustices, regardless if material in the shape of flood-prone settlement locations or mental in injustice-acceptance, are prevailing until today. However, while it can be important to understand the situation better and counteract certain issues more informed, it might be better to search for solutions for the future than merely focussing on origins of problems in the past.

177 Salonabend Neurourbanistik with Richard Sennett, by the Alfred Herrhausen Gesellschaft, 11 January 2019, Berlin.

3.3 Spatial Lens

In the third part, the largly mental but also material manifestations of spatial injustice will be looked at through the spatial lens. Referring back to the different scales which were introduced in the beginning, a description of the urban environment from a micro-, building scale up to the city-wide scale is included. While the information of the historical structural development from the preceding is also touched upon, a significant section incorporates findings of a previously conducted research of the urban form of Kampala[178], extended by an examination of barriers, patterns, and smaller materialisations of perceived injustice.

The first part looks at the city-wide spatial structure, building upon the central concept of urban form; conceptualised as the built embodiment of urban society, and divided in macro, meso- and micro-scale (city, settlement/neighbourhood, building). It is constituted of different layers, including street networks, build environment, and land use/division.[179] Two different levels of urban form are distinguished to conceptualise urban form. The city level (macro scale) includes the demarcation of the urban agglomeration and is necessary to understand larger interrelations, e.g., the accessibility to the economic centres or differences between core and peripheral areas. The second level is the settlement area (including both meso- and micro-scale), which looks more at the built environment and includes built density, space allocations, proximities, or the density of street intersection.

Furthermore, the spatial aspects of social vulnerability are looked at. There are countless definitions of vulnerability and its constituting parts, mainly depending on the time, context and background of academic research. Therefore, it is crucial to define the various components of social vulnerability and coherently conceptualise them. To start with, vulnerability is conceptualised in a broader context as either “the amount of (poten-

178 Gall, T., 2018. How floods shape Kampala’s urban gestalt: A case study of spatial injustice between urban form, risk exposure, adaptive capacity and sensitivity. Master thesis at IHS, Erasmus University Rotterdam.

179 Pont, M. B. and Haupt, P., 2009. Space, Density and Urban Form. Technical University Delft: Doctoral Thesis; Oliveira, V., 2016. Urban Morphology: An Introduction to the Study of the Physical Form of Cities. The Urban Book Series. Basel: Springer International Publishing; Hillier, B., 2009. Spatial Sustainability in Cities.

tial) damage caused to a system by a particular climate-related event or hazard" or as the "state that exists within a system before it encounters a hazard event"[180]. Currently, the most accepted definition follows the latter. Furthermore, a distinction between different types of vulnerability can be made, even if there is no consensus on the actual separations or terminology. The most common types which can be found in the context of urban climate change vulnerability are social (also referred to as human) and biophysical (or natural) vulnerability. However, various studies

180 Jones and Boer 2003 and Allen 2003, in: Brooks, N., 2003. Vulnerability, risk and adaptation: A conceptual framework.

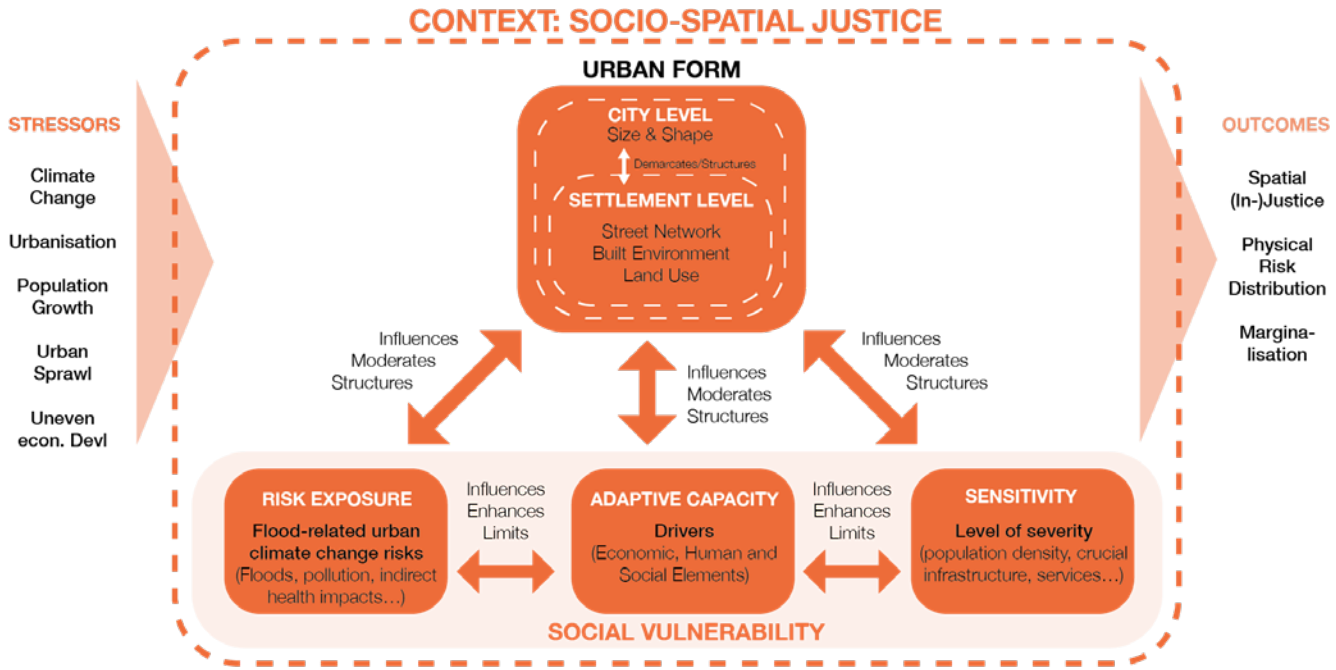

Fig. 26: Conceptualisation of the interplay between Urban Form and Social Vulnerability

Gall, T., 2018. How floods shape Kampala's urban gestalt.

also examine, for example, economic or institutional vulnerability.[181] Vulnerability, in general, is defined by Adger,[182] building upon the definition of the Intergovernmental Panel on Climate Change (IPCC) as the "state of susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence to adapt". In the case of social vulnerability, the system which is vulnerable encompasses all socially connected elements, while biophysical vulnerability can be defined as the vulnerability of the natural environment to climate change-related stressors. The diagram (fig. 26) shows the main elements and their connections and how they affect each other. It shows various stressors which largely overlap with drivers of urban injustices, and influence the larger context of socio-spatial justice. The latter is constituted of the flood-related urban risk as the most substantial environmental threat in Kampala, which is made up of the above-described risk exposure, adaptive capacity, and sensitivity. The second larger element is urban form at different levels, which affects and is attenuated by the three components. Lastly, the outcomes include predominantly spatial (in-)justice, physical risk distribution, and marginalisation, among others.

One primary question which arose in the course of the study was why so many people (choose to) live in areas which are affected by disasters and reoccurring environmental risks. Isunju et al. primarily blame the overall population growth and rural-urban migration in combination with unclear boundaries and land-ownership, as well as the "long-term failure of government regimes to enforce development control"[183] which led to a large number of people encroaching on wetlands. In a study of several of these affected communities, Isunju et al. found that over 55 % were female and over two thirds 30 years and younger, which shows the unequal exposure to disaster risks. Additionally, the majority (73.3 %) of the surveyed households were only earning between 40 and 120 USD

181 Brooks, N., 2003. Vulnerability, risk and adaptation: A conceptual framework.
182 Adger, W. N., 2006. Vulnerability.
183 Isunju, J. B., Orach, C. G. and Kemp, J., 2015. Hazards and vulnerabilities among informal wetland communities in Kampala, Uganda. Environment & Urbanization, 28 (1), p. 276. Available at: https://doi.org/10.1177/0956247815613689 [Accessed 14 April 2018].

(assumed conversion rate of 1 USD = 2,500 UGX in 2015) and nearly half without secondary education. Furthermore, the perception of vulnerability to hazards was enumerated and shows that more than 50 per cent perceive themselves as very vulnerable to disease vectors and floods.[184] Lastly, there is a risk of floods negatively affecting the water quality of both tap water and even more well water which, combined with the rising water shortages, endanger the water provision for the (mostly poor) population while contributing to the spread of diseases due to poisoned water and less preventive sanitary actions in times of clean water scarcity.[185]

While a strong interrelation between the risk exposure to floods and the socio-economic characteristics of the affected population seems evident, proving it required an approach to distinguish the flood-prone areas – an endeavour which is always challenging in environments of less detailed databases. Different approaches have been developed and applied to model the biggest risk driver of run-off water and the effects of land use changes on the Murchison Bay Catchment area (catchment area of Lake Victoria incorporating most of central Kampala). However, limitations of the underlying data and spatial inaccuracies make them only attractive as a basis but insufficient to produce a more comprehensive representation.[186] The most promising and high-resolution approach was found to be a watershed flow analysis through the hydrology tool kit of ArcGIS, which incorporates the topology and rain patterns and lead to a raster dataset (fig. 27) which shows in which are most of the rainwater ends up and, therefore, produce the highest flooding risk. While consideration of

184 Ibid.; Isunju, J. B., 2016. Spatiotemporal Analysis of Encroachment on Wetlands.

185 Godfrey, S., Niwagaba, C., Howard, G. and Tibatemwa, S., 2003. Water Safety Plans for Utilities in Developing Countries – A case study from Kampala, Uganda. Case study report. Available at: http://www.bvsde.ops-oms.org/bvsacg/red_lac_psa/casos/uganda/kampala2.pdf [Accessed 11 April 2018].

186 Fura, G. D., 2013. Analysing and Modelling Urban Land Cover Change for Run-Off Modelling in Kampala, Uganda. University of Twente, Faculty of Geo-Information Science and Earth Observation: Master thesis. Available at: https://webapps.itc.utwente.nl/librarywww/papers_2013/msc/upm/fura.pdf [Accessed 11 April 2018]; Anaba, L. A. et al., 2017. Application of SWAT to Assess the Effects of Land Use Change in the Murchison Bay Catchment in Uganda. Computational Water, Energy, and Environmental Engineering, 6, pp. 24-40. Available at: http://dx.doi.org/10.4236/cweee.2017.61003 [Accessed 11 April 2018].

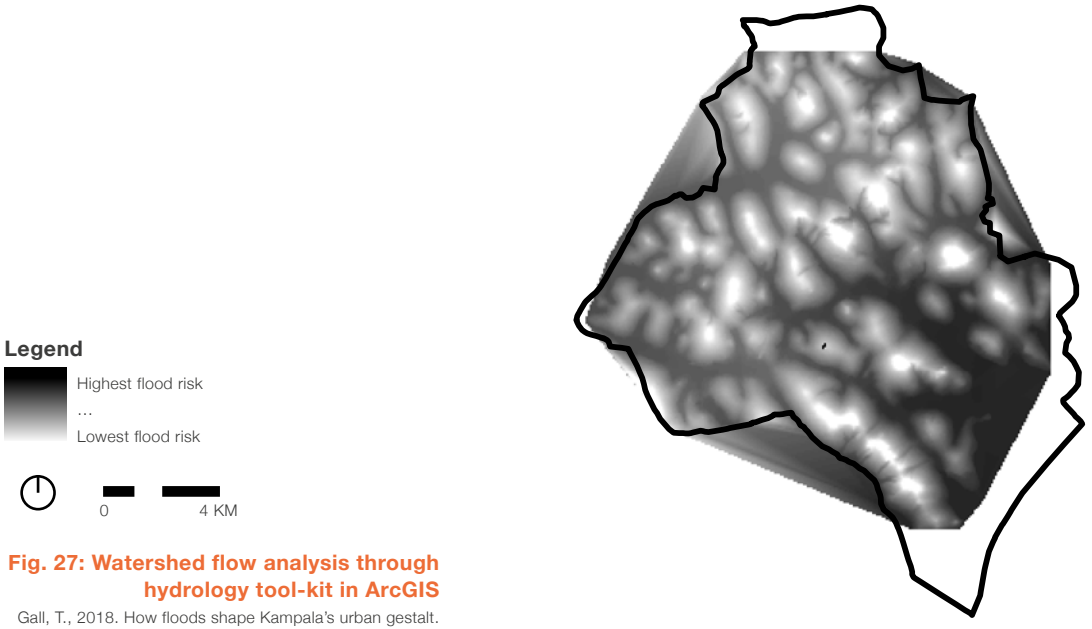

Fig. 27: Watershed flow analysis through hydrology tool-kit in ArcGIS

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the permeability and water storage capacity would have been necessary to create a more accurate model but which data is not existing, the resulting scores were cross-checked with the existing water bodies and the location of past floods and seemed to be fairly accurate.

Despite the flooding risk itself, the remaining elements of the research needed to be translated into concepts, variables and indicators (fig. 27) in order to measure and compare the various elements. The four main concepts of urban form, risk exposure, adaptive capacity and sensitivity were subdivided into several variables. Each of these variables is further divided into one or several measurable indicators.

Furthermore, before the methodology could be used, several steps needed to be undertaken. These include defining the sample selection and size. Also, the approach can be divided into two parts: 1) Data assessment, which includes underlying steps and calculations, and 2) Data analysis, which interprets the resulting variables. Regarding the sample selection, the spatial analysis was conducted at two levels. First,

CONCEPT	VARIABLE	DEFINITION	INDICATOR	DEFINTION
URBAN FORM	1.1. Street Network: Space Syntax	Space Syntax analysis of streets regarding road segments role in the overall road network.	Integration (Space Syntax)	The number of turns which need to be made from one street segment to reach all other streets through the shortest path.
			Choice (Space Syntax)	The probability of each street segment to be used by users to reach another segment.
			Depth Distance (Space Syntax)	Linear distance from each street segment to the total number of street segments.
			Connectivity	Number of spaces immediately connecting a space of origin.
	1.2. Street Network: Accessibility	Network and infrastructure related aspects which define the accessibility to various physical elements of the urban area and interconnection of one area in comparison to others.	Accessibility to economic centres	The average distance of each household to economic centres through the shortest path.
			Accessibility to educational facilities	The average distance of each household to educational facilities through the shortest path.
			Accessibility to health institutions	The average distance of each household to health facilities through the shortest path.
			Accessibility to public transport nodes	Average distance of each household to public transport nodes through the shortest path.
			Distances to health facilities	Percentage of households with access to health facilities under 5 KM
			Distances to educational facilities	Percentage of households with access to educational facilities under 5 KM
	1.3 Built Environment	Physical structures in a certain area and their individual and aggregated characteristics.	Building density	Buildings per sqkm
			Site occupancy index	Percentage of ground covered by buildings
			Average building size	Average size of residential and commercial buildings
			Building proximity	Average distance to next 25 buildings
	1.4 Land Use	Land use analysis incl. green percentage and the type of settlements	Amount green space	Percentage of green space in relation to total space
			Settlement type	Primary settlement type according to EARF residential settlement classification
RISK EXPOSURE	2.1 Probability	The exposure to risk, the distance to flood-prone areas and the perception of risks of the residents living within.	Location in watershed area	TIN-based water runoff model
			Distance to flood prone area	Distance to the nearest flood prone area defined by KCCA
			Disaster occurrences in last 2 years	Subjective perception of number of disasters in area in the last two years
ADAPTIVE CAPACITY	3.1 Resources	The financial and property resources of the residents.	Range of income from household	Total income per household based on EARF household survey in selected areas
			Household expenses	Food, electricity, water, other energy, healthcare, education plus 3* transport expenses
			Area of plot	Average plot size of residential and commercial buildings
			Cost of purchase	
			Current price	Current price of property
			Household relation to site	Relationship of household to property/site
			Percentage ownership	Percentage of owner property instead of rented/subsidised
	3.2 Access to Services	The access to basic services and the type and quality thereof.	Access to water	Availability of water
			Connection to sewerage network	Availability of sewerage network
			Septic tank	Availability of septic tanks
			Sanitation facility	Availability of sanitation facilities
			Solar Panel	Availability of solar panels
			Water access	Type of water accessible
			Water quality	Satisfaction with water quality
	3.3. Behaviour	Social characteristics which influence behaviour of residents	Social integration	Integration in community measured by the number of years living there
			Initial location	Location before moving to current plot
			Satisfaction with neighbourhood	Satisfaction with living in present neighbourhood
			Plan to relocate	Existence of plan to move to another place within 2 years
			Prevalence of improvements on plot	Type and quantity of improvements undertaken
			Cost of improvements	Amount of money invested in improvements
	3.4 Knowledge and information	Access and prevalence to internet and the level of education.	Internet use	Prevalence of internet use in area measured by number of tweets
			Level of Education	Highest level of education in household based on EARF household survey in selected areas
SENSITIVITY	Human sensitivity	Characteristics of the urban population which affect the sensitivity to climate change risks.	Population density	People per hectare based on 2014 survey
			Household size 2	Household size based on EARF household survey in selected areas
			Gender 1	City-wide gender distribution
			Gender 2	Gender distribution based on EARF household survey in selected areas
			Age groups	Age distribution in households based on EARF survey in selected areas
			Female headed households	Percentage of female-headed households based on EARF survey in selected areas
			Economic resilience	Sufficiency of current household income.
			Type of employer	Type of main employer
			Type of occupation	Type of main occupation
			Expropriation	Prevalence of evictions or expropriations the past five years
			Safety	Level of safety (regarding crimes, harassment, violence) for the women of household
			Household affordability	Easiness for household to afford current property
			Property restrictions	Prevalence of restrictions in process of finding a place in the area
			Property ownership	Type of owner of used property
	Building sensitivity	Characteristics of the built environment which influence the severity of disasters.	Type of dwelling	Categorical type of dwellings in area.
			Dwelling material	Quality and type of built material of buildings
			Built floor quality	Quality of floor from 2014 survey
			Built wall quality	Quality of walls from 2014 survey
	Infrastructure sensitivity	The quality and quantity of infrastructure in affected areas which are at risk.	Street density	Weighted length of primary and secondary roads per sqkm
			Nearest road	Nearest paved road
			Travel time	Average time to travel to work/school

Fig. 28: List of indicators

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the whole official city area and secondly two research corridors defined through the research team of the East African Research Fund[187] (EARF) which established a purposive sample of some parishes to cover a wide variety of land development patterns. Two corridors were distinguished: one from the centre to the north-west (along Hoima Road), and one to the east (along Jinja Road). For the household survey which was carried out as part of the research compendium, about 2800 households were enumerated which are equally distributed over eight strata (four different residential housing types and core and peripheral locations). Inside these, the households were selected through a random generation of coordinates. The selection was done based upon a broad coverage of the different qualitatively defined settlement types (fig. 30), levels of centrality and vulnerability and distances to flood-prone areas. The data collection method is a mixed-method approach using existing quantitative secondary data and semi-structured expert interviews, observations to distinguish the public transport nodes, as well as the conducted EARF household survey. These strategies were chosen to gather a broad data set of both quantitative and qualitative data to understand the distribution and prevalence of risk and its interrelation with urban form. The gathered qualitative data mainly assist the interpretation of the quan-

187 Project consortium in which previous master thesis was located.

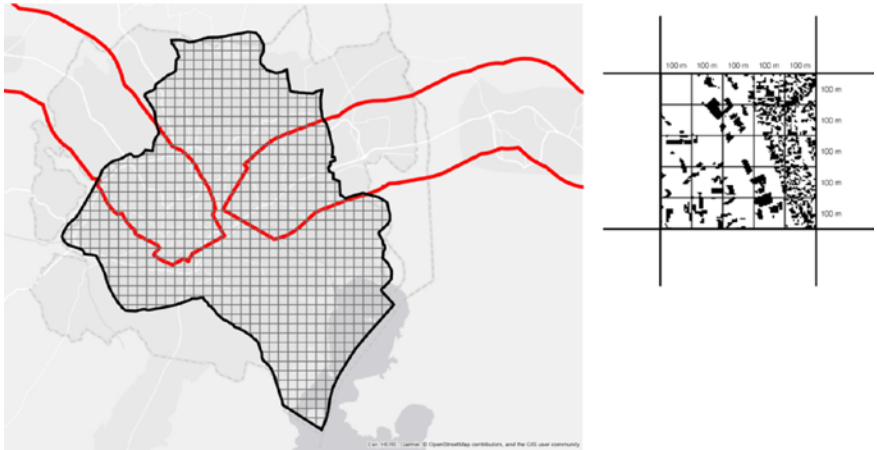

Fig. 29: Research corridors + grids
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titative findings while also supporting the process of quantitative data collection as well as the focus, selection and weighting of the secondary data indicators.

The collected secondary quantitative data comes from various sources. Firstly numerous information from governmental institutions: i.e. the jurisdictional boundaries, the national household survey of 2014 as well as the flood-prone areas. Secondly, information produced as part of the EARF project is integrated: mainly the different housing typologies and the household survey. Additionally, other data sets are collected from a range of recent datasets and reports which examine one particular issue in detail: amongst others, the reports on the vulnerability of Kampala[188] and the World Bank report on economic centres.[189] Lastly, for quantifying urban form and accessibility to various facilities, in-depth spatial data is required which was mainly collected from OpenStreetMap (OSM) and extended through own mapping.

The conducted data assessment of the spatial elements consists of mainly four different parts: 1) Assigning existing geo-referenced data to cells (fig. 29); 2) Incorporating various types of spatial analysis and including basic calculations like counting the number of buildings or the length of streets per cell; 3) the Urban Network Analyst Toolbox for ArcGIS of the City Form Lab is used to calculate integration, choice and depth distance, based on infrastructure data from OSM; 4) the Variable-width Floating Catchment Area (VFCA) method which builds upon the Two-step Floating Catchment Area Method (2SFCA) is used to calculate accessibility to economic centres, different facilities or functions.

The latter method was initially developed to calculate the accessibility

188 UN-Habitat, 2011. Vulnerability Assessment of Climate Change in Kampala and Uganda. Final Report. Available at: http://mirror.unhabitat.org/downloads/docs/10405_1_594150.pdf [Accessed 14 April 2018].

189 Goswami, A. G. and Lall, S. V., 2016. Jobs in the City: Explaining Urban Spatial Structure in Kampala. World Bank Group, Social, Urban Rural and Resilience Global Practice Group: Policy Research Working Paper 7655. Available at: http://documents.worldbank.org/curated/en/526171467993515746/Jobs-in-the-city-explaining-urban-spatial-structure-in-Kampala [Accessed 14 April 2018].

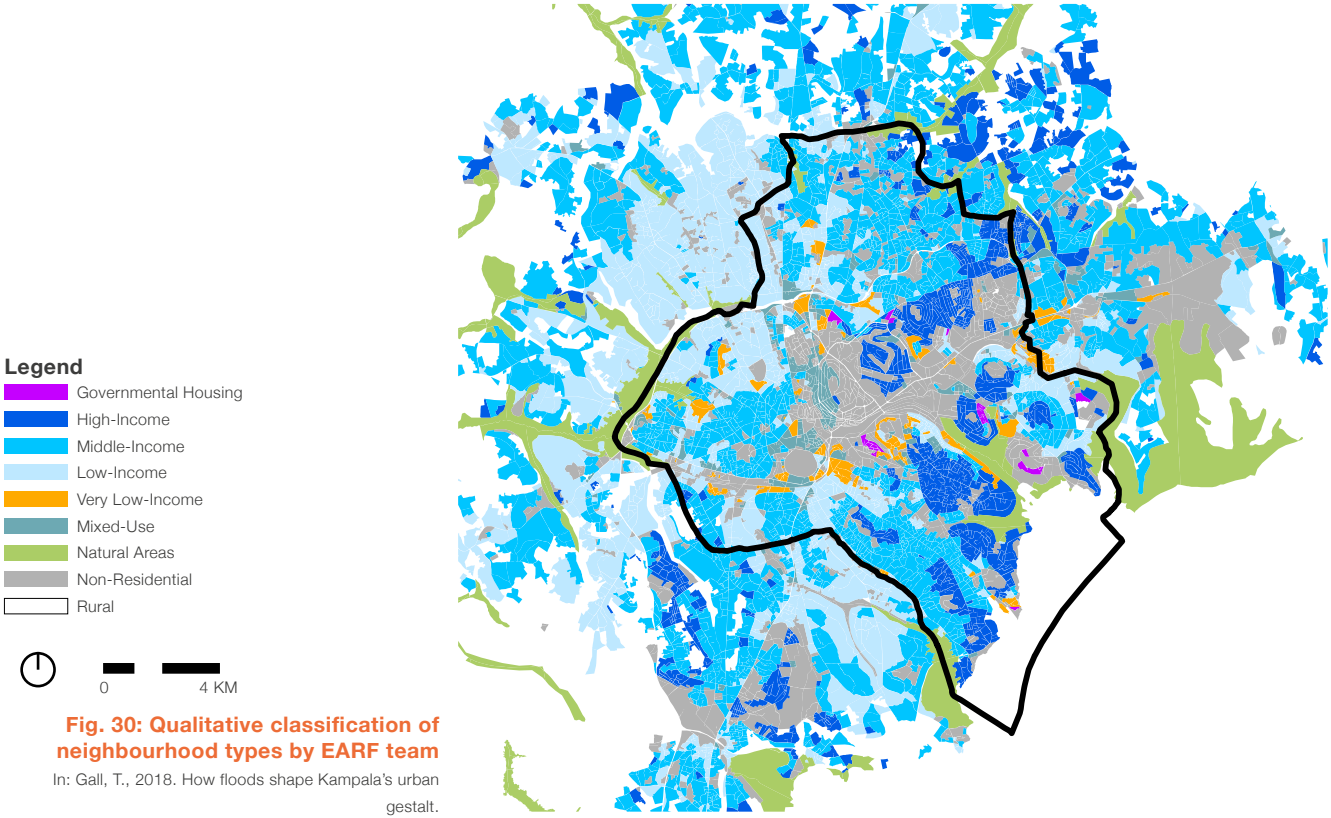

Fig. 30: Qualitative classification of neighbourhood types by EARF team

In: Gall, T., 2018. How floods shape Kampala's urban gestalt.

of the population to health facilities. However, Dony et al.[190] adapted the methodology to include other types of functions and takes varying weights or levels of attractiveness into consideration (in their case, for example, the size and number of amenities of parks). Therefore, it is seen as the most appropriate method to calculate accessibility to various functions which differ between their characteristics. As an example, the research calculated the accessibility to public transport nodes. However, one node just serves a few city-wide transport modes while others also

190 Dony, C. C., Delmelle, E. M. and Delmelle, E. C., 2015. Re-conceptualizing accessibility to parks in multi-model cities: A Variable-width Floating Catchment Area (VFCA) method. Landscape and Urban Planning, 143, pp. 90-99. Available at: https://doi.org/10.1016/j.landurbplan.2015.06.011 [Accessed 14 April 2018].

cater for national or international routes. Therefore, an adapted weighting is required to take these differences into consideration. Lastly, the VFCA like the 2SFCA depends on the selection of the calculation method of distances. For this, different approaches exist, amongst other the Euclidean distance, the time-distance or network distance,[191] which was chosen and measured through the Network Analyst Toolbox of ArcGIS.

To ensure comparability between data with varying units, the values were normalised before further analysis after which each value is represented by a number between 0 and 1. Additionally, various indicators were aggregated to compound scores for each variable to simplify the comparison and regression analysis. The resulting, geo-referenced quantitative data of the selected areas allowed for regression analyses to distinguish

191 Kanuganti, S., Sarkar, A. K. and Singh A. P., 2016. Quantifying Accessibility to Health Care Using Two-step Floating Catchment Area Method. Transport Research Procedia, 17, pp. 391-399. Available at: https://doi.org/10.1016/j.trpro.2016.11.080 [Accessed 04 June 2018].

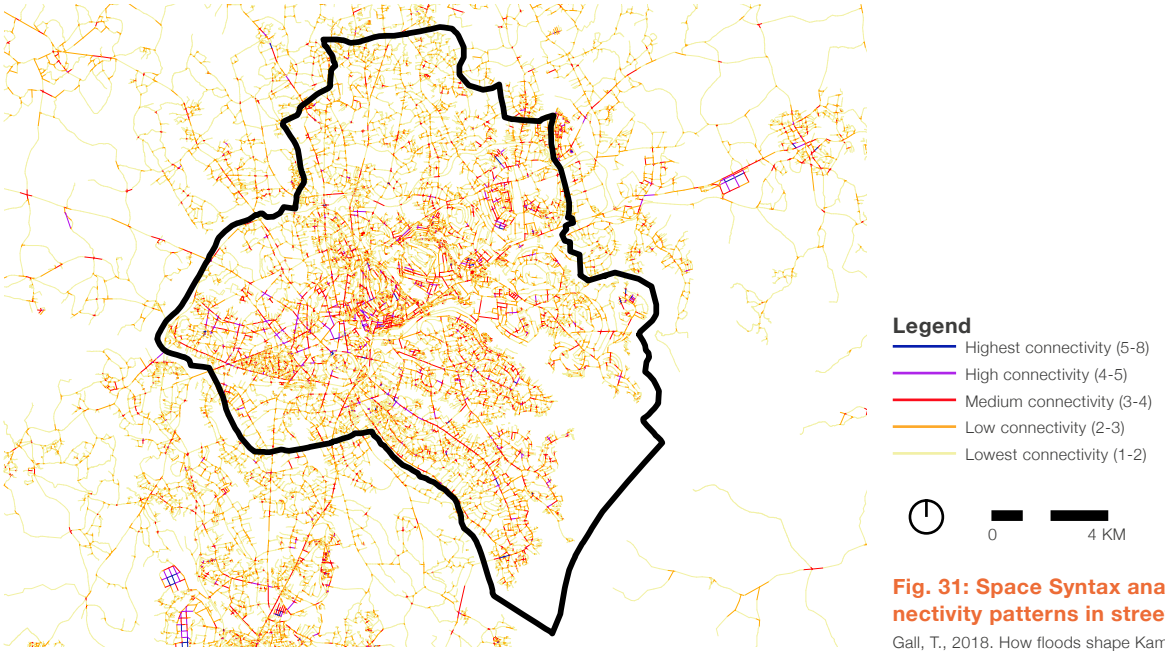

Fig. 31: Space Syntax analysis of connectivity patterns in street network
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patterns and understand which factors correlate. Through the qualitative data of the interviews and previous reports and articles, the quantitative results could be further explained, interpreted and situated into the broader context of risk distribution and the resulting spatial (in-)justice.

Without delving deeper into the spatial analysis itself, a few of the results shall be discussed as well as how they can benefit this thesis. Most importantly, the research resulted in highly significant between various social characteristics and the flood risk exposure – proving the initial claim that people with lower adaptive capacity (e.g., income, education, resources) are often at much higher risks than people with higher scores. While this does not come as a surprise, the spatial and high-resolution characteristics of the produced data can still provide various insights into the urban fabric of Kampala. Referring back to the previously highlighted central part of Kampala as a very selective and segregated area as a result from the colonial planning approaches, this area is clearly distinguishable in most maps, except in the network analysis. In a representation of the connectivity and street density (fig. 31), measuring how many

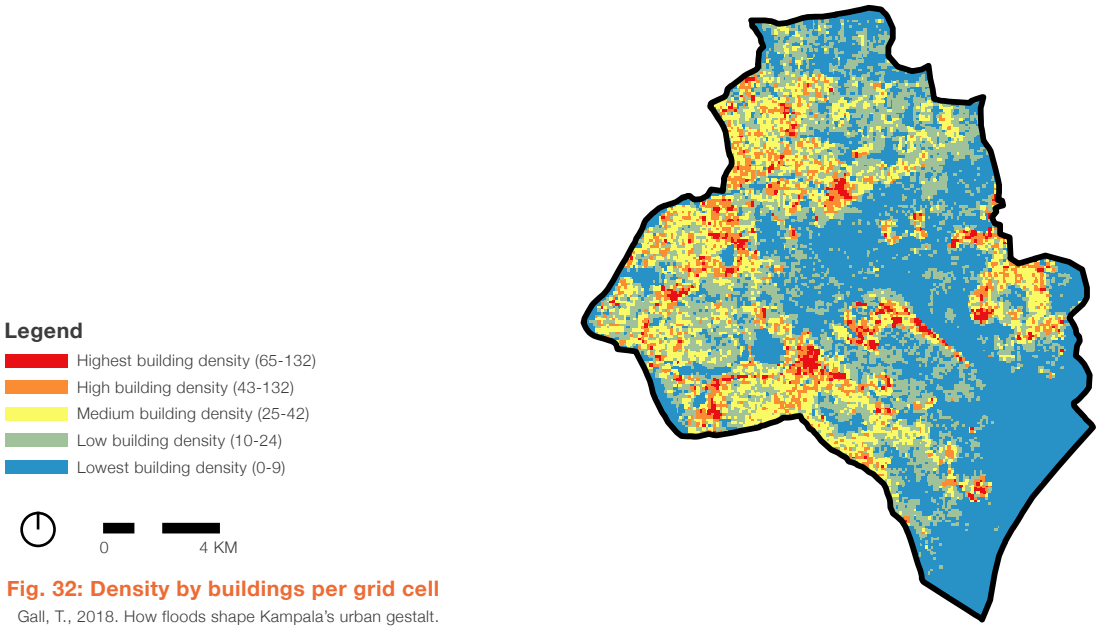

Fig. 32: Density by buildings per grid cell

Gall, T., 2018. How floods shape Kampala's urban gestalt.

streets are connected, it shows that the centre has the highest scores making it theoretically the most accessible and connected area. If it is however compared with the settlement typologies (fig. 30) or building density (fig. 32), it shows a clear central 'gap' in the urban fabric. And this does not take into consideration yet, that the streets in the centre are of significantly better quality overall, further emphasising the inequality. This means, that the central area of the previous colonial centre has the lowest density but best accessibility. This pattern becomes even more prevalent in the resulting maps which show the scores of the three elements of social vulnerability (fig. 33) as well as the compound score of them and the standardised values for urban form. The top right shows the flooding risk exposure based on the conducted watershed analysis, which shows clearly the hills and the catchment area of Lake Victoria. The second shows the adaptive capacity and highlights the accumulation of low scores in the mainly the area west of the centre which includes Old Kampala and overlaps highly with the area of the Baganda kingdom and residence of the Ugandan population during the colonial times. The right-most map shows the sensitivity and highlights again the hole in the urban fabric with the lowest sensitivity in the previous colonial and today's high-income residential and commercial centre. When these three scores are combined to social vulnerability (flooding risk exposure - adaptive capacity + sensitivity) it provides a quite accurate representation of the current urban pattern, while the urban form represents the lowest built densities, highest street density and service/facility accessibility, and best quality of the built environment. Despite being a mostly quantitative approach and resulting in scores itself which can never show the actual complexity, and despite mainly focusing on flood-related risks, it can still provide a better understanding of the city-wide socio-spatial pattern of Kampala and also supports the previously discussed remnants of the colonial times.

This can also further be seen if one compares the flooding risk exposure in different areas of the city which due to their origin in the topographical structure did not change significantly since the beginning of Kampala's history. Most of the areas (despite the royal enclosure itself) in which the

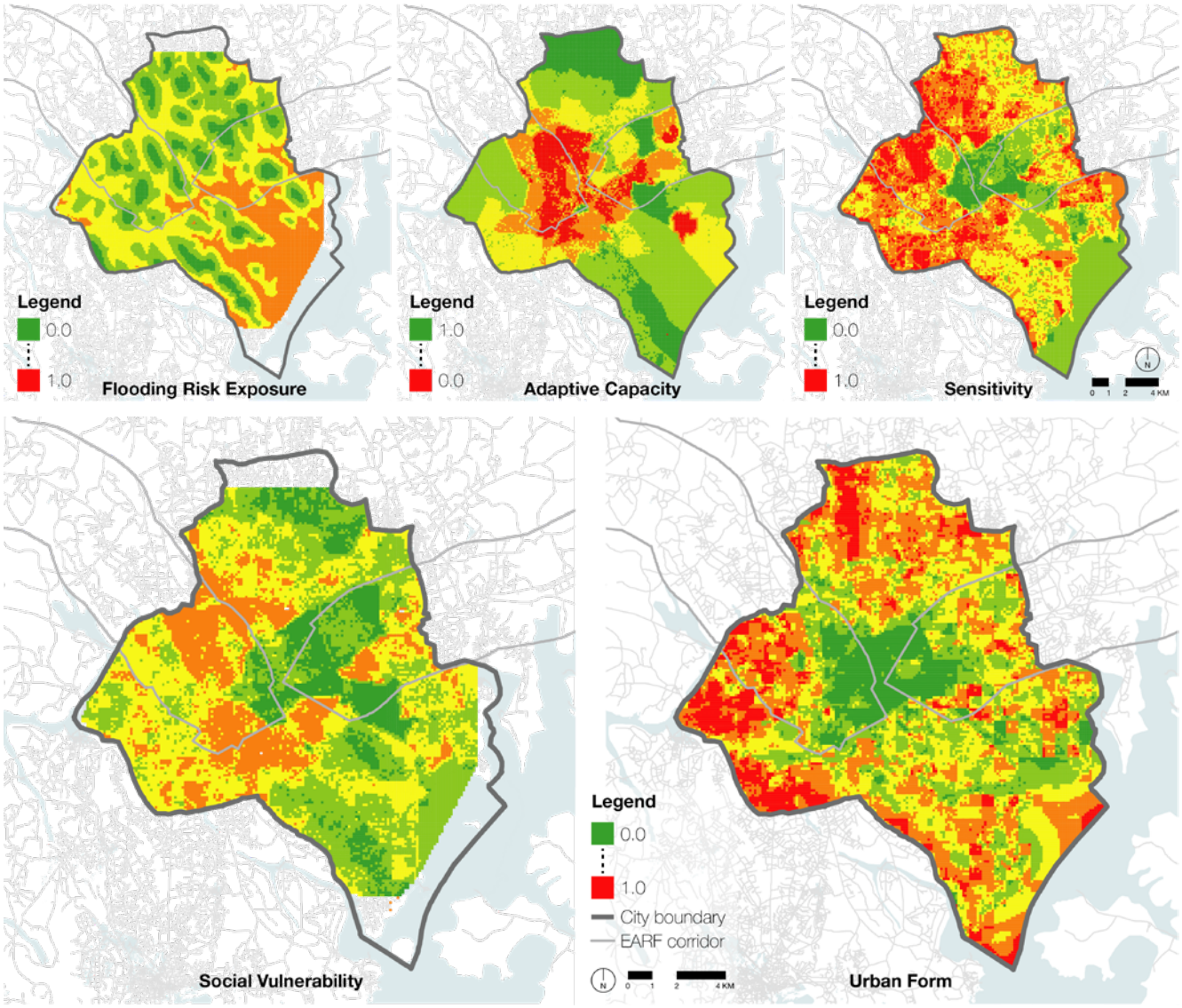

Fig. 33: Standardised scores for constituents of social vulnerability (top) and two main elements (bottom)

Gall, T., 2018. How floods shape Kampala's urban gestalt.

Ugandan population was permitted to settle during the colonial times and most importantly where the workers' settlements were situated are of low altitude and with high exposure to floods. And still today, they are housing the lowest-income groups and suffer the most in the yearly floods.

Zooming further into the settlement scale, a few things are important to mention. Despite the above-discussed overall lower density, the most crucial differences are the quality of the built environment, including the streets, availability of sidewalks, green infrastructure and buildings itself. In a comparison of two adjacent settlements (fig. 35) Kololo and Naguru on the eastern part of the central 'gap', it becomes very evident that there are not just two different settlement types clashing, but two different cities altogether. In the left part are few, large, and high-quality built structures, surrounded by green gardens and wide and comparatively well-maintained streets. On the right side, plot demarcations are not possible to distinguish, more smaller buildings with mainly metal-sheets as roofs are connected by an organic and small-scale grid of pathways which are mostly unpaved. Additionally, while not visible from the top view, the buildings in Kololo are surrounded by mainly 3-4 m high walls, partly secured with additional (electrical) fences or barbed wire (fig. 34). While many buildings have their own plots and gardens, many are also situated in shared compounds and gated communities, ranging from a few individual houses to large accumulations of single and multi-unit residences. Referring back to the concept of heterotopias as other spaces,

Fig. 34: Street view from typical street in Kololo (Maclom X Ave)

Fig. 35: Aerial photo of eastern Kololo and part of Naguru (right)

GoogleEarth © 2018 Google, Image © 2019 Digital Globe.

the gated communities and even whole single-use residential areas like parts of Kololo, can be described as 'other spaces' as they are restrictive regarding access, do serve only a very particular group of society and create a gap in the surrounding urban structure. Without criticising or neglecting the reasons behind gated communities in general, their location in the centre of Kampala leads to two different and negative aspects. On the one hand, the city for the majority of the society is not in the centre but in a ring surrounding the former colonial headquarters. Furthermore, along its boundaries, places of strong inequality arise (as visible in fig. 35) in which highly different patterns clash and show both sides a very distinct, often inaccessible and unknown character. While in the end, the actual living circumstances are not different than in a situation where there is more distance and a less hard boundary, it still creates a strong and contrasting image itself, while also affecting the mental understanding of injustice on both sides. Lastly, the map extract also shows three of Kampala's most common ways of demarcating boundaries and dividing

areas. First, there is a large, multi-lane street which is made for cars and does not cater for pedestrians, street/public life, or easy and safe crossing. Furthermore, there is a 'buffer zone' of mainly commercial activities along the street which are predominantly fully gated and create a backside and impassable boundary for residents of Naguru. Lastly, a natural border as a small green corridor, often combined with water streams, which as visible from the footpaths in the aerial photo, only has a small and most likely informally produced pedestrian passage. Another element which often can act as a barrier are railways; however, these are in the case of Kampala not very significant and do not largely interfere with the surrounding and monotonous environment.

Lastly, a brief look at the micro-scale shall be made, while some elements have been already mentioned in the settlement scales. Most importantly, the size and quality, of buildings differ, combined with differing surrounding public space or private gardens. Most importantly on the smaller scale is, on the one hand, the access to clean water, sanitation, and electricity, while, on the other hand, the qualities of the floor, walls, and roof have a significant impact on the resilience against the weather, floods, or human threats. As also visible in the map of the compound score of sensitivity before which included the access to basic services and quality of building materials (walls and floor), these factors vary significantly, however, should not need too much explanation. Every person should have a certain amount of space, which is safe, provides shelter, clean water and sanitation, as well as electricity. If these circumstances are not given, it can have a negative impact on the health (spreading of diseases), productivity (lights at night/for businesses), and the mental state of residents (having a home/place for retreat).

Despite these issues clearly disadvantaging the urban poor, very interesting debates result out of the little to no public spaces in high-income and gated communities with little interaction and exposure to the surrounding neighbourhood, while in areas like Naguru most spaces in between the building can be considered semi-public and shared with many people extending their daily lives into the shared spaces. Under the consideration

that public space and interaction are considered vital elements of human life, the stronger prevalence can be seen as a positive contributor to the livelihoods of people residing in low-income areas. However, this issue will be taken up in the following sub-chapter.

3.4 Human Lens

In the last section of looking at spatial injustice through four different lenses, the varying impact spatial injustice can have on individuals despite their similar built environment shall be looked at in more detail. Some of the most important aspects which can impact the mental manifestations of spatial injustice are gender, age, as well as the ethnic, economic, and educational background. However, many more characteristics can have an effect on perceived injustices.

Additional to a brief general discussion, four stories from fictional characters are utilised to highlight certain issues of injustice in Kampala. All four are based upon real people, stories, and experiences collected from the author during the stay in Kampala supplemented with input from people living and working in similar fields there. However, the perspectives neither attempt to in any way comprehensively represent the livelihood of all residents in Kampala nor shall create the assumption that an external researcher is ever able to fully understand the lives of people in completely different contexts than the own. Nevertheless, it hopefully contributes to highlighting the complexity of injustice, emphasising certain elements, and most importantly, creating an increased awareness for readers from completely different contexts who did not have the chance to make similar experiences themselves.

Furthermore, it must be highlighted that the purpose of the human lens shall not imply that it is separated from the spatial, historical, or theoretical lens, but instead is deeply connected and interrelated to all others. Rather, by giving it its own sub-chapter, it shall emphasise the importance and provide space to discuss certain issues more in detail while focussing on the individual perception of injustice in a more independent manner, as well as a driving force itself instead of simply seeing it as consequences of external events or environments. Additional to looking at some of the elements highlighted in the four stories, some connections to the theoretical part are made, while also emphasising the importance of public space and interaction as introduced in the last sub-chapter, and the question if ‘mixing’ different societal groups can help to alleviate perceived and actual injustices, shall receive particular attention.

Alain D.

Congolese immigrant, 16, homeless

"I came to Kampala illegally due to the ongoing conflicts in the Democratic Republic of Congo 2 years ago together with some friends of the same age. I lost my family and have no known relatives anymore in Congo or elsewhere."

"Most of my days I spent trying to do small business and sell things on the street, but it is hard as I do not speak much of Swahili, Luganda, or English, and people prefer to buy from others. And also the police is often making problems as they do not want us to sell informally on the streets. They tolerate it mostly in the old town where I spent most of my time, but I couldn't go to the centre or richer places as they would stop and arrest me. But here are also many other people trying to survive and we always need to be careful and run away or fight if they see us."

"The most difficult place is finding a place to sleep. Sometimes, friends provide me with a small place to stay somewhere, but most nights I hide and sleep somewhere around here."

"Of course, I would want to have a permanent place to stay one day, but I am not even able to afford a small plot somewhere in the cheap areas farther outside. There are often controlled by some people who say they own everything and want high prices for a very small piece for a hut. And anything affordable is so far away that I couldn't do my work anymore."

"I am glad I made it here and can keep living in more peace, but I do not know what to do in the future. I can't go to school and only learn from friends who are mostly also immigrants. And I don't think I can make enough money as a foreigner without any rights to build up anything bigger. But I will keep trying and hope for change…"

In the first of the fictional stories (orange boxes on the left), Alain, a Congolese immigrant, describes parts of his daily struggles. Most important is the emphasis on the experienced fear in some public spaces, due to the presence of police and no feeling of personal freedom and “safety”. He therefore only uses certain parts of the city, namely Old Kampala with many places to seek refuge. Furthermore, the story shall highlight the difficulty to establish oneself, intensified through the impossibility to find low-income accomondation in close proximity to the city centre which is the only place to conduct business and which is too costly and time-intensive to reach from areas in the more affordable periphery. While Alain’s story is particularly difficult due to his status as an illegal immigrant – like many in Kampala – he simultaneously represents the largest portion of the society: The youth which faces very limited opportunities, high competition, insufficient parental or societal safety nets, and has strong feelings that they, despite being the majority, are least represented and taken care off from the political institutions. Furthermore, among the urban youth widespread criticism is also more common, due to less exposure to the more conflict-ridden past, as well as due to an increasing use of technology to communicate, share news, and organise themselves.

The second character, Faith, a mother of four, shall direct the focus on rural-urban migrants who come to Kampala searching for a more prosperous future. However, many still face difficulties to establish their livelihood, while it is still often (perceived) better than in their family’s village, mostly in hindsight of the future of their children. Additionally, it raises two important gender issues: On the one hand, Faith feels unsafe in public after dark and has been harassed on her way back from home before – which is a pervasive problem in many cities in sub-Saharan Africa – particularly after dusk. Secondly, her oldest daughter cannot continue her education and has to stay home to take care of the children, while Faith hopes for her to find a husband who can financially support her. While the rights of women, as well as emancipatory initiatives, are further on the rise, it is still a common practice and expectation for women. This shall re-emphasise the importance of enabling mechanisms, as well as the difficulty which participatory actions can bring along, with marginal-

Faith L.

Single mother, 32, four children, living in Nakawa

"I moved to Kampala as a teenager searching for a better job from a village east of Jinja. Today I work as a maid to take care of my four children. It was easier when my husband was still around, but he left and now I can just survive because of my friends and neighbours."

"Everyday, I am spending a lot of time taking the minibus to work, and most days need to work until late and come home at night. It is always dangerous for a woman to come home in the dark. You don't know who will be on the streets, it's dark and police normally is not around. I am scared every time…and was harassed several times before, but nothing bad happened so far…"

"I am afraid for my children, it is a difficult time and I can't provide them a good future… I hope my girl marries soon (14 years). What are her options? She can't go to school anymore and needs to take care of the household and her siblings."

"I like the people I am working for, a rich Ugandan family, but I am often treated badly when heading my work in Bugolobi. It is all beautiful and nice there, but I don't feel welcome there – I don't think I belong there. Of course here (in Nakawa) it does not look that nice, we have little space and never know how long we can stay or when a flood comes, but I am happier here. I rather have my friends around me and know they can look out for me than being somewhere else where it is nice but nobody I know."

"Most important would be more safety and lights and easier access to water. We get sick often and it takes a lot of time to fetch water every day. […] And I would like to my own house here someday, but it's too expensive. Sometimes I think about going back to my village, but my children will have it better here…"

ised groups just representing the role society has given them instead of neutrally being able to represent themselves as equal individuals.

On the other hand, Godfrey, a member of the elderly community, still remembers the end of the colonial times, the dictatorship, and generally conflict-ridden past and, therefore, shows a much higher consent with today's reality. Further, his age and the expanding city make it more difficult for him to get around, while his children are also too busy to make ends meet and cannot always take him somewhere. Despite highlighting his higher acceptance of the political representation, the major problem for him is public transport. The heat, long waiting times and distances are becoming increasingly unbearable with older age and limit his flexibility, as well as the ability to access the city and the places he has to go to.

In the last story of Kelly is shall be highlighted that mental boundaries can exist in various directions and while being less substantial, they can still have an important impact on the accessibility and right to the city, and the freedom of moving. Furthermore, its consideration is essential to reduce socio-economically formed mental barriers which are never merely one-directional. Despite my own experiences, this is a broadly experienced limitation, mainly in the younger generations, and its possible positive impact was impressively described by Steven Otter in his book uMlungu in Khayelitscha. He was a white South African journalist who decided to live several years of his early career in Khayelitscha, the largest informal settlement of Cape Town where he was most likely the only white person. In his book, he described how the perception can significantly change by sheer exposure – again both-directional, but also which misconceptions exist in his 'normal' circumstances, and how people of the previous social environment reacted adversely towards it as a kind of fear of the unknown.

However, these statements about mutual exposure to different groups in order to reduce prejudices and decrease wrong perceptions are often controversial as well. Many prefer to live among similar people to themselves, due to a variety of reasons, including, for example, the safety which staying in gated-communities or highly secured compounds

Godfrey M.

Senior citizen, 72, living in Nabweru

"I am living in Kampala since a very long time, together with my wife for the last 40 years here in this house. Our children are still around and help when they can but they are also struggling and don't always have time for us."

"The biggest problem is getting things done and going somewhere, mostly since the new highway, the Northern Bypass, goes between Nabweru and the centre."

"We are mostly minibuses and Boda Bodas, but it's very uncomfortable. Mostly when it's raining or very hot. I don't feel well when waiting long in the sun or sitting inside with unbearable temperatures. The few official bus lines are too far away and not reachable."

"In the past, many things were closer by here in the area but now many important places are far away. The city is growing more and more, and it's hard to get around. And my work becomes more difficult as well…I am still working and repairing things, but there is more competition and less people are coming to me."

"But it is still much better than in the past. Of course, I still remember the times when we couldn't move anywhere and my parents told me a lot about the hardships. Today, of course, we are freer, but the Europeans and Indians were replaced by the rich and powerful. At least we don't have any wars anymore and I am sure my children will have a better future…"

"I would be happier if not everyone wants a bigger house somewhere else and if we could do something about the floods and get better roads. And if people would take better care and help each other, and the city does something about public transport and infrastructure in our neighbourhoods – that would be great."

brings along. Susan Fainstein, despite also highlighting the importance of mutual exposure, comments, referring to her guidelines which were mentioned in an earlier chapter:

> *"Adherence to this set of guidelines does not require that people who cannot get along live next door to each other. Indeed, people have the right to protect themselves from others who do not respect their way of life. What is important is that people are not differentiated and excluded according to ascriptive characteristics like gender or ethnicity. But neither should people be required to tolerate disorderly conduct or anti-social behaviour in the name of social justice."*[192]

This challenge can further be linked back to the beforehand-discussed challenge of the 'happiness paradox' which states that individuals' happiness is most positively affected by a comparatively higher status than the direct environment. Therefore, without suggesting that high-income groups should always stay in proximity to low-income areas in order to feel 'happier' (which can also be easily questioned), focusing more on the opposite direction, a partly segregation based on socio-economic status is not always the problem. Instead, it should never become completely parallel worlds which are built upon principles of social segregation but rather a free choice of location which – combined with unavoidable land market impacts – still leads to a certain degree of accumulations of specific groups.

Lastly, without being the most suitable person to write about it, religious affiliation can have a significant impact on individual lives, create an additional sense of belonging above direct spatial relationships, and further lead to cross-societal interactions. South African theologian Gert Prinsloo, who extensively studied the impact of religion on justice perception, states that spatial injustices result mainly from individuals struggling to define the context of their suffering. He argues that when people expe-

192 Fainstein, S., 2009. Spatial justice and planning; p. 11.

Kelly L.

Canadian development worker, 29, living in Bugolobi

"Living in Kampala is great, the city never sleeps and there is always something going on. I can imagine staying here much longer. But I do not like the strong regulations from my employer where to live, not to use Boda Bodas and so on. They are too scared and don't let us move freely."

"Of course, I would love to live somewhere else where more things are happening on the streets. And where I can walk to some places. But yes, I am also sometimes scared, and feel uncomfortable and that I do not belong in certain places…but still."

"Most of us "expats" spend their time around Acacia mall and meet in our safe homes, or fenced and fancy bars and restaurants… There is also not really a way of exploring every part of the city if for the ones who would want to. Just sometimes I go with some of my friends from here to other areas…but alone I don't feel very comfortable."

"Most of the time I have to take Ubers. The public transport is inefficient, time-consuming and not comfortable…and I have been robbed on one bus before as well. Sometimes we take it as a group when we have the time or if travelling for fun outside the city. But I can't use it during the day for work appointments as it takes too long or during nighttimes due to safety concerns and general unavailability after dusk."

"Of course I am aware of my privileges but I would rather be a more normal part of the society and move freely and connect to other people. I speak a bit of Kiswahili and take lessons in Luganda to make it easier to connect, but I would wish more openness and integration – from both sides…"

rience challenges, it causes them to think on the potential causes and solutions to their state; and that human suffering comes with an intimate and personal origin and hence becomes difficult for others to understand where assistance is possible.[193] Prinsloo further suggests that suffering or the inability to develop a sense of belonging is not entirely spatial but also involves the experience of individuals who need to engage in acts of 'spacing' and constant need to reshape the contexts of space within their environment. [194] Without going deeper into the theological dimension, it is still interesting to note on the one hand the link to spatial justice, while the church, its spatial manifestation, also forms an element of the built environment and acts as one of the few places which are neither commercial nor places of transit and still represent important places of interaction, exchange, as well as possibly building of agency.

Concluding the human lens, certain elements shall be highlighted. Most importantly, the impossibility to understand spatial injustice by only looking at larger scale issues like the quality of the built environment, accessibility to basic services, or exposure to risks. Instead, perceived injustice can largely vary between two neighbours living in the same place, mostly due to individual features like age, gender, origin, financial resources, social and family networks, health, and education, as well as the character and mental state itself. While certain classifications can be made – and are necessary to understand and tackle injustice challenges – they can never produce a full picture and always require a more in-depth understanding to avoid wrong assumptions or generalisations.

193 De Beer, S. F., 2016. Discerning a religious agenda for spatial justice in South Africa.
194 Mustafa, D., 2001. The spatial imagination. In: Environment and Planning. Climate and Planning, 33, pp. 1785-1805.

4 'Understanding' Spatial Injustice

Building upon the preceding four lenses on spatial injustice and its diverse manifestations in Uganda, this chapters attempts to tie the most important elements back together and develop an 'understanding' of spatial injustice – which in its theoretically wished for comprehensiveness is impossible altogether. However, a few central conclusions can be drawn.

First, the current spatial injustices evolved and developed through a series of events in the political, societal, colonial and structural planning process and its' reversing is not possible without understanding the underlying causes and constituents. However, it cannot be mitigated by just looking for reasons in the past but needs a strong focus on the present and future.

Second, spatial injustice is a deeply complex matter building upon various theories of space, the production thereof, and its political impact and importance to form agency within the society. Furthermore, justice and spatial justice theory in particular of the last decades led to crucial findings which are fundamental for the development of counteracting strategies. One very essential is that spatial injustice is simply a representation or manifestation of the state of the society and, therefore, cannot be reduced without always thinking simultaneously in non-tangible dimensions of urban systems. While this does not mean that spatial interventions cannot lead to increased equality between the urban residents, or that a change of the societal structure always progresses in the same pace as the spatial representation thereof, it would be erroneous to assume that spatial approaches itself can eliminate injustices – which is anyway impossible altogether.

Thirdly, the spatial dimension of the manifestation of injustice is as complex as the city itself. Spatial injustices can range from varying accessibilities to basic services or facilities of the daily life, to unjust exposures to climate change risks, which is in the case of Kampala embedded in the historical structure of its spatial planning, to micro-scale spatialities like the diverse materialisation of defence mechanisms of individual households. Therefore, a single approach can never tackle spatial injustice on

a larger scale but only solve, if at all, one particular issue.

Lastly, spatial injustice is profoundly personal and manifests itself differently for residents of the city. Defining characteristics in this sense are the income level, the location of the residents, gender, age, ethnicity, and societal environment. Furthermore, it would be wrong to understand spatial injustice as a one-directional challenge: While the urban poor understandably suffer mostly, spatial injustice also manifests itself in the minds of the 'more resourceful' parts of the population. An optimal city should be without barriers and limitations for everyone everywhere. In many African cities, however, many people would never go to certain places. Either due to a felt lack of security, belonging, or awareness, as well as the impact from the personal social network which creates from a young age onwards a fear and often wrong assumption about the reality in different parts of the city. While the priority in fighting injustices should, referring to the earlier described capability approach, always be on the least advantaged, it should not be ignored what impact also a consideration of the other direction can have – for example by reducing the mental boundaries between different parts of the society leading to less exclusionary perceptions of differences.

5 Ways towards Spatial Justice

As the previous chapters hopefully showed, spatial injustice can manifest broadly and result in a vast variety of challenges and encompasses a variety of dimensions which make its understanding and even more importantly, its tackling highly complex. While, as stated before, a perfect, just society and city is impossible due to the nature of our own, it is still evident that there is an increasing pressure to reduce it or at least stop the current trends towards more injustice. Building upon the capability approach of providing everyone the most equal starting point and capability to express their freedom as much as possible, this chapter wants to discuss two different categories of approaches, partly supported by looking at examples from elsewhere. Starting with more tangible approaches in the spatial realm, discussions of the importance of societal adaptations follow. The latter also include the discussion of the role of planners/architects to highlight prevailing inefficient remnants of outdated ideologies and approaches and question the role of practitioners in environments where currently just a fraction benefits from the beautified concepts and planning paradigms. Furthermore, a short discussion on the importance of governance and politics is essential to be included, while this work does in no way attempt to make solid statements or precise policy suggestions.

On a more theoretical note and as discussed earlier, neither utilitarianism nor total utilitarianism, nor the capability approach can be directly translated into policies or actions. However, if minimum capabilities are defined (as they are for example in the human rights or Nussbaum's list of urban capabilities) and then a shared intention of urban stakeholders is developed which aims at increasing them over time through focusing on the highest existing lack of the most important capabilities, a constant increase of capabilities and therefore in most cases also the total utility can be achieved. And this process can in most cases be achieved in the urban realm and can often take a material shape.

However, the definition of the ultimate goal is a significant challenge, regardless if as 'utility' or capabilities. These can be, for example, personal freedom, livelihood, quality of life, well-being or happiness. However,

these are, on the one hand, mostly not directly quantifiable and, on the other hand, individualistic itself. Additionally, there are certain elements to it, which lead to controversial findings. For example, as introduced in chapter 3.1, various long-term studies across different continents and times showed that resources and improved living conditions did not significantly correlate with the happiness of an individual but more with the comparative value to the direct environment. This would mean that if happiness/personal well-being is defined as the ultimate goal of increasing capabilities and total utility and eradicating injustice, in order to achieve the highest level of happiness for an individual, the surrounding society would need to be less happy/resourceful – therefore rendering the whole concept or its final fulfilment as impossible and possibly counterproductive. While this is certainly a limitation in regard to the overall objective, it should still be possible to concentrate on improving the livelihoods of the least advantaged in the society in order to reach an overall more just urban environment.

5.1 Spatial Approaches

In order to do so, some spatial approaches shall be discussed, which mainly concentrate on tackling distributive injustices. Foremost, a better (spatial) understanding of injustices should be the foundation of any approach. Without a comprehensive picture of the urban reality for all societal groups, there cannot be a sufficiently evidence-based approach to focus on the most crucial elements. Furthermore, it should be emphasised that acknowledging the existence and scale of injustice is important as a fundamental step to embrace discussion, requiring active and unbiased listening to all involved stakeholders as the foundation for both the acknowledgement as well as a better understanding. Building upon that, different groups can be distinguished. First, the question of the actual system boundary is important. All parts of the functional entity of a city should be incorporated to avoid left-out areas outside the official administrative city boundaries. In Kampala, the KCCA made an important step towards this by creating the Greater Kampala Metropolitan Area (GKMA) as a second administrative planning entity. However, most focus is still on

the inner city and there is a need to incorporate the outer areas with the same priority. Furthermore, for the entire area, large-scale planning documents which include zoning and land use planning need to be revised and focus more on reducing injustice than economic development alone. While static planning approaches alone will not be able to change a lot, it is nevertheless important to plan for each area including currently mostly unplanned settlements and integrating their upgrading and formalisation, while at the same time avoiding to create more single-use functions. Instead, areas should become less mono-functional and diverse, as well as including a variety of functions, in order to guarantee more equal distributions of services, facilities, as well as job opportunities. And as Fainstein noted, the "boundaries between districts should be porous."[195] One element of these larger planning approaches should also focus on avoiding further gated areas (e.g., not approving for large scale gated community projects) to ensure that the urban fabric becomes not even more scattered and interrupted. However, instead of simply forbidding them there should be a stronger focus on creating best practices and alternatives to take the needs of the high-income society into consideration. These can range from more focus on social security principles, higher densities, better street lightening, more mixed-use, different building typologies and living formats to community surveillance and security measures. While it should of course not be the aim to reach higher perceived safety by more surveillance or deployment of security forces, there is no perfect solution which could reverse a century of segregation. Therefore, while always being careful, it should be more important to create new typologies of settlements; even if that might require counter-intuitive measures.

Despite that, a strong focus should always be on upgrading the less advantaged areas and overall decreasing of differences – internal (e.g., road infrastructure) as well as city-wide (e.g., accessibility to schools). While the KCCA in Kampala is also increasingly focusing on this, it is insufficient to cope with the scale of the challenges. In order to achieve this, more support from the higher governmental institutions would be nec-

195 Fainstein, S., 2009. Spatial Justice and Planning, p. 10.

essary, which is, however, very limited.[196] Due to the prevailing increase of flood-related risks, the mitigation of risks and adaptation should be further highlighted. Only a few areas have a too high exposure to flooding risks and have only planned and inclusive relocation as a viable solution, while most areas' situation could be significantly improved by better drainage, waste and freshwater management, better road and basic service infrastructure, as well as tenure formalisation as a tool to provide better safety and increased investments, opposed to little investments due to an unknown future.

196 Based on interviews with public officials in both KCCA and ministry.

Cheonggyecheon highway | Seoul, South Korea

A small channel, previously covered by an elevated highway, was transformed into a new green oasis which functions as an environmental adaptation measure, recreational spaces, as well biodiverse retreat.

Fig 36: Before and after photo of elevated highway in Seoul

Photo by Lloyd Alter. Available at: https://www.treehugger.com/sustainable-product-design/removing-highways-can-reduce-traffic-jams.html [Accessed 20 February 2019].

On a smaller spatial scale, removing barriers can include different approaches. For example, tearing down or reducing (elevated) highways (e.g., like in Seoul, fig. 36), as some of the most prevalent barriers. Instead of reducing them, in Kampala – like in many other countries in sub-Saharan Africa – more and larger highways are built with the aim to accommodate for the increasing individual motorised traffic as well as to foster economic growth through better transport opportunities. However, while it might make sense in certain areas, specific attention should always be paid on their impact on the overall city, how they are integrated with the existing road network, and who benefits mainly from them.

Furthermore, by removing unnecessary walls and fences in public areas, and access restrictions to certain areas, the accessibility and justice of usable space can be positively influenced. While this sounds like a very superficial and self-explaining approach, in reality, it can have a huge impact and is often not considered due to a variety of reasons (e.g., keeping certain people out of areas, or visually covering run-down places from major streets). One of many examples in Kampala is the interface between Kololo and Naguru which was discussed in chapter 3.3. If some of the walls which close off Naguru would be removed and additional access routes would be established – something easily doable – combined with an adapted street layout; a currently very strong boundary would become more porous and could lead to more bi-directional exposure, activity along the road, as well as on the long term to a complete dissolving of the barrier.

Additionally, large built-up areas (including gated communities, as well as, if possible, large scale single-use areas such as public, commercial or hotel complexes) should be perpetuated with smaller paths and connecting links, while simultaneously avoiding further large scale developments which are secluded from the public life.

Also, run-down places which could link parts but are unlighted and create feelings of unsafe areas can be strong barriers. Often even bridges can be counter-intuitively barriers, e.g., through safety concerns with fewer people around, no dedicated pedestrian space, no proper lightening,

Palace Bridge | s-Hertogenbosch, The Netherlands

By Benthem Crouwel Architecture

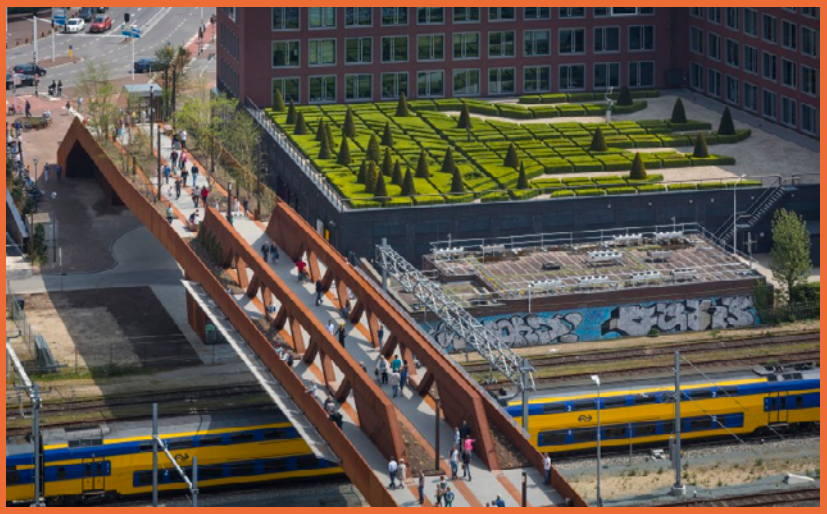

Fig 37: Inviting pedestrian bridge over railways with greenery

Photo by Benthem Crouwel Arch. Available at: http://benthemcrouwel.com/projects/paleisbrug-s-hertogenbosch/ [Accessed 20 February 2019].

easy escape opportunities for thieves (as experienced myself in Durban on a large railway bridge in the middle of the day). The Palace Bridge in the Netherlands (fig. 37), while in a completely different context, is a good example how a bridge over large infrastructures can be designed in a more people-oriented and inviting manner. Therefore, removing barriers can either mean reducing or removing physical infrastructures which are no longer necessary, out of scale or in 'wrong' places, or mental barriers like uninviting bridges or unpopulated areas. Sometimes, it can also be seen as removing mental barriers of not wanting to go to certain areas or being scared of them which can be counteracted by events, temporal activities and awareness building campaigns which let people enter places which they would not have done before.

MetroCable | Medellín, Columbia

A widely celebrated project linking central and previously disconnected areas is the MetroCable in Medellín, Columbia. It was done in a cooperation between the municipality and private companies and is continously extended. Special characteristics of the project are the focus on low-income neighbourhoods as well as the combination of public transport, waste management, adminstrative facilities, and urban renewal. It is heavily used and reduced travel times significantly.

Fig 38: The Metrocable over top the Santo Domingo barrio

Photo by Steven Dale. Available at: http://gondolaproject.com/category/installations/medellin-metrocable/ [Accessed 20 February 2019].

Additional to removing barriers, also linking different places in various ways can help to reduce injustices. This can be through physically linking places, as famously done with cable cars in several South American cities (e.g., Metrocable Medellín; fig. 38) which attempt to connect places which are separated either through a natural or man-made barrier (e.g., river, highway, walls). Of course, it does not always need to be a cable car, but can be as simple as building an additional pedestrian bridge over a large highway. Secondly, linking can be done by reducing the commuting time needed between certain areas. In many cases, Kampala included, impoverished and under-serviced areas are in the urban periphery and cost their residents a lot of money and time if they want to

Light Rail Network | Addis Ababa, Ethiopia

Fig 39: Stop of new elevated LRT in Addis Ababa

Photo by Addis Fortune. Available at: https://addisfortune.net/articles/first-look/ [Accessed 20 February 2019].

Bus Rapid Transit (BRT) System | Dar es Salaam, Tanzania

Fig 40: Dedicated buslanes & central, accessible public bus stops

Photo by Daily News Tanzania. Available at: https://allafrica.com/view/group/main/main/id/00043128.html [Accessed 20 February 2019].

access the urban job markets or need to visit facilities such as hospitals or universities. Therefore, reducing the commuting time can significantly decrease the location- and poverty-induced disadvantage in the urban hinterland. This can happen through improved public transport (e.g., Dar es Salaam, Kigali, Addis Ababa; fig. 39-40), better road networks into these areas, or public or private policy mechanism. In the public sector, it can be through transport subsidies for under-serviced areas, while a private sector example is Uber South Africa, which despite facing major critique about working rights etc., has reduced fares and incentives to create more availability and shorter waiting times in otherwise under-serviced areas like Khayelitsha, Cape Town.

Lastly, by creating inclusive and inviting public spaces, areas for interaction between different groups, for economic and cultural activities as well as for enabling stronger societal agency and representation can contribute to alleviating injustices. However, in many cases, these places shall be avoided for the exact same reason, as they could produce a platform for political opposition. However, also in smaller scales, and through temporary interventions, these spaces can help to foster discussions and awareness. On Church Square in Cape Town, for example, a temporary installation was created by the urban think tank Future Cape Town (fig. 41) with the objective to raise awareness of urban design themes, as well as providing a space for people to discuss ideas and communicate their needs, while showing how with little effort, places can gain quality. Beforehand, the square was merely a place of transit while during the installation, many people stopped, took a break, and used the square to interact with other people.

5.2 Societal Changes

Building upon the statement of spatial injustice being primarily a representation of injustices in the overall society, societal changes can be seen – despite spatial approaches – as equally important or even more fundamental, and address mainly the procedural injustice. Referring back to the list of Nussbaum's capability principles in chapter 3.1 as 'human

Churchsquare | Cape Town, South Africa

Temporary installation by Future Cape Town encouraging participation, reusing existing public space and giving power to citizens through space. The before unused square became an active platform for temporary events, as well as becoming a resting place during other times.

Fig 41: Churchsquare in February 2018

Photo by author.

urban rights', one critical foundation of a more just society is having a common understanding of what the rights of urban residents are, and what their capabilities should include. Despite those basic capabilities, everyone should have access to basic resources (e.g., shelter, water, energy), as well as opportunities to achieve their 'functioning'. Building upon a needed common agreement on what these are, there is the need for looking at the central obstacles to get there, and how to reduce them – pathways which this sub-chapter attempts to explore. While many of

these injustices move seemingly far beyond the spatial scope, it should be evident by now that they are contrariwise intrinsically intertwined.

First and foremost, it needs to be better-taken care of historical differences and injustices. This requires a thorough reprocessing of the colonial rule, dictatorship, ethnic and gender-based inequalities. Three approaches from the context of sub-Saharan Africa (all not in the best way though) are the forceful land redistribution in Zimbabwe, and the power-enforced dereliction of ethnic differences, or reversing laws in South Africa. Instead, while this challenge is too socially-embedded and broad for specific suggestions, the approaches should be centred around education and awareness building, open discussion and discourse, removal of prevailing injustices (extreme land ownership differences) and fighting

The social tapestry of Cape Town, South Africa

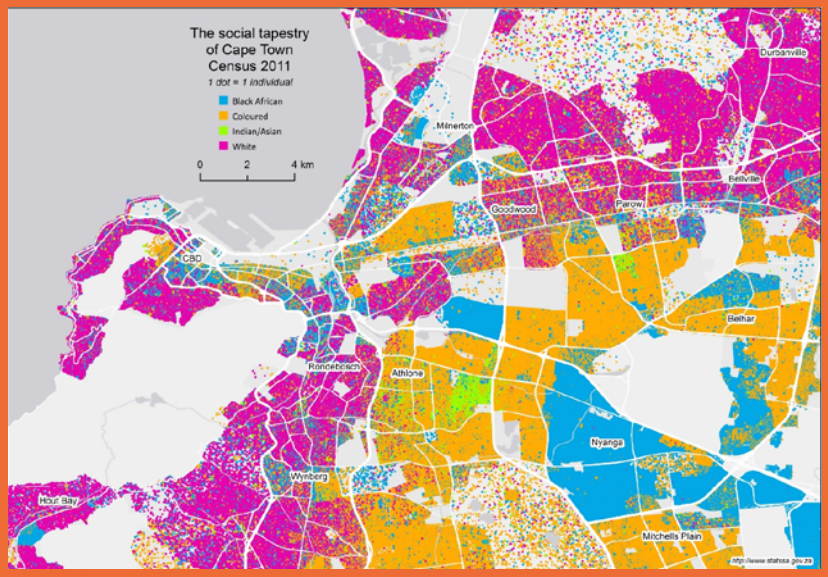

Fig 42: Prevailing patterns in Cape Town's socio-spatial fabric

By Statistics South Africa. Available at: http://www.statssa.gov.za/?p=7678 [Accessed 20 February 2019].

counterproductive and constantly reinforcing prejudices. However, this is a long process which cannot be overcome in a few years. But this does not mean that its tackling is not crucial at the moment. In regard to the gender roles, educational programmes in primary and secondary schools which are currently on the rise in several countries in SSA such as Kenya, aim at raising awareness and having open dialogues at an early stage and seem to have highly positive outcomes. For ethnic differences, again a more open discussion and awareness building, as well as enabling more moments of mutual exposure can provide a good start, as well as more progressive and proactive steps towards others from all parties.

Reclaim the City initiative | Cape Town, South Africa

Initiative fighting large corporate and property investments interests to incorporate more affordable housing in projects and avoid further gentrification, through protests, occupations and legal actions.

Fig 43: Reclaim the City protest in front of occupied house

Photo by Naib Mian. Available at: https://www.groundup.org.za/article/affordable-housing-city-cape-town-and-developers-crossroads/ [Accessed 20 February 2019].

Lastly, free and open speech, both in the media as well as on individual level needs to be ensured, combined with an accountable justice system to make institutions and people more accountable and reach a state in which everyone is able to discuss topics openly instead of suppressing them which more likely leads to the opposite. In this perspective, the main responsibility lies within the political environment, however, with strong dependence and interrelation to civic institutions and the society which can have a strong positive impact (e.g., Reclaim the City initiative; fig. 43). Furthermore, a stronger discourse can aid a more goal-oriented prioritising based on areas with the highest needs and potentials for success by more strongly involving citizen, the local community (e.g., through more powerful representatives) as well as more involvement of the private sector in the process. Many projects can reach overall positive outcomes and still be economically viable, and can, therefore, be executed by the private sector without further burdening the limited financial public households.

Despite the overall societal and political environment, a range of more specific actions can assist in counteracting spatial injustices. First, in the same way as for the spatial approaches, it initially requires a deep understanding and acknowledgement of the current situation, emphasising the challenges and shortcomings (fig. 42 shows a way of public awareness building). Secondly, formalisation should be a priority, including land tenure security, as well as equal political representation. This forms the basis of a more just society while being crucial for strengthening feelings of safety and the sense of acceptance and belonging. Thirdly, institutional or politically enabled divisions need to be removed as much as possible, including restricted public areas and unjust treatments, such as police evictions or other repercussions based on, e.g., ethnicity, social or economic status.

Furthermore, while more sounding like a goal for more environmentally friendly cities, building a city for pedestrian and people without cars instead of prioritising cars helps in the context of SSA to put the majority

of the society in focus. This can be fostered, e.g., by building stronger public transport, and prioritising pedestrian areas, while subsidising it if necessary as it happens already in several other countries in SSA. Furthermore, it is crucial to strengthen the sense of community by enabling, supporting, and initiating local events, meetings, interactions and by focussing on inclusion and collaboration instead of avoiding or forbidding them due to the fear of forming political agency.

This can also further be initiated by the government, also possibly leading to higher societal support of political leadership. In Rwanda, several years ago, a mandatory, national-wide monthly community service – Umuaganda – was formally established, which is not supported by everyone, but led to millions of saved development funding, as well as stronger collaborations inside communities and a strengthened sense of public ownership.

More specifically focusing on injustice, the running of campaigns, creation of places, workshops, focus groups, and platforms in which feelings of injustice, spatial manifestations thereof, as well as suggestions and proposals can be made, equally focusing on all areas of the city, can lead to higher awareness, exposure, and more goal-orientated policies as well as community engagement. At the same time, political, societal, and urban inclusion of all should always be a highlighted priority in urban and regional development visions and plans, going further than repeating merely the SDGs of inclusion but specifying how that applies to the specific contexts and society which is affected.

Lastly, injustice and the elimination thereof, should be further seen as important enough to not only mention it as overall goals, but instead to produce accountable step-by-step action plans on how the challenge can be tackled, which actions are most promising, come first, can have what impacts, what the risks are, how they can be mitigated or anticipated, and how to create a participatory process to achieve it. Additionally, informing citizens about the current status, the plans, and creating

mechanisms to hold everyone accountable, such as online dashboards and regular public updates, is crucial for people to learn about the status, success so far, ways of contributing, as well as having an anonymous environment to share opinions and ideas.

In many of these steps, planners and architects can – and should – also contribute in various ways, regardless if as part of the public or private sector. Most importantly, they can incorporate tackling injustices in their agendas and work on raising awareness, highlighted the importance, as well as leading by example in regard to participatory planning and inclusive and open discussions. Furthermore, there is a huge need for new building and settlement typologies which can lead to more mixed-use, social interaction, and less segregation – while not neglecting the interests and needs of different user groups. And these typologies can, with the input of the community, just be created, tested, and realised, if planners advance their designs and closely collaborate with the private and public sector in order to build an enabling environment.

Lastly, mainly addressing internal mental manifestations through perceived spatial injustices, exposure to presumingly non-reachable realities and spaces like secluded high-income classes or vice versa should be enabled and encouraged through various approaches. This can help to get a better understanding of the overall situation, as well as contribute to the process of creating new shared visions for the urban and societal future. Injustices in the spatial dimension are often difficult to objectively judge and even more to tackle as there is not always a right or wrong. Nevertheless, creating new paradigms and inclusive, self-determined visions might be able to counteract the constant longing for new realities in the built environment.

6 Conclusions

Coming back to the central objective of this thesis – creating diverse and broad insights into the challenge of spatial injustice in cities of the Global South and in particular in Kampala – this last sections shall summarise the work and finally result in some conclusions as well as recommendations and potentials for further research.

As mentioned several times, this thesis does not claim comprehensiveness, and many other elements could have been included or given more attention. Nevertheless, the goal was to delve deeper into spatial injustice without just looking at one component, scale, or manifestation. There is a range of literature including very theoretical and philosophical concepts and on the other extreme many small scale spatial interventions which attempt to counteract spatial injustices in very particular contexts. However, both of these, as well as everything in between are often disconnected and looked at from very dispersed perspectives. Therefore, in this thesis, I attempted to combine a broader range of lenses and information and exemplary focus on some elements in the specific case of Kampala, which shares many characteristics with other cities in sub-Saharan Africa and can have a certain representativeness.

This broader study was attempted to cover by looking first at the theoretical background of justice theory, as well as the meaning, production, and power of space; while also drafting an overview of the context of Kampala. This part should create a common understanding of the terms itself, the meaning in combination, together with some of the most prominent concepts behind it, including those of Lefebvre, Fainstein, Foucault, Sen, and Nussbaum. The most crucial element thereof is the strong interrelation of the social and spatial dimension in cities, and that spatial injustice can never be understood or looked at without deeper consideration of the society living within an urban agglomeration.

Following the introduction and background, four different lenses were used to look at spatial injustice from different viewpoints. In the first – the theoretical lens – concepts were discussed which can partly be translated to practice or help better understanding real situations. Secondly, the historical lens of Kampala attempted to highlight where colonial and

past planning paradigms and socio-political events shaped the current urban fabric as well as the societal environment. In the third, spatial lens, a previously undertaken, predominantly quantitative, study was in combination with some other sources used to provide a more thorough perspective of nowadays' urban structure and how spatial injustices prevail across various scales. Lastly, in the human lens, four fictional characters were utilised as a way of highlighting the individuality of the mental manifestation of spatial injustice in the case of Kampala and how the same built environment can have significant but very varying implications for the daily lives of its residents.

After the different perspectives, a short chapter attempted to combine the main elements of the before-discussed topics and create a baseline for an "understanding" of spatial injustice – which is however seen as impossible to achieve altogether in admirable depth. Despite its inability to conceptualise and summarise spatial injustice's complexity, it should have emphasised some of the most important findings and elements thereof and constituted the foundation for a range of ways and approaches – both spatial and societal – which can contribute to the urgently needed higher priority in urban development to counteract rising injustices. While I do not claim that these approaches all lead to the admired outcome or work similarly in every context, they should still provide an initial starting point on a pathway towards decreased injustices.

Lastly, I do not see this thesis as a finished product but a small milestone on a personal and professional journey to gain a better understanding which hopefully can be translated into practical actions. And the work has undoubtedly benefited to my own conceptualisation and initiated new thoughts and ideas, which I want to dedicate the last section to.

6.1 Recommendations

As mostly already mentioned in chapter 5, I consider the stronger integration of open, critical, and inclusive spatial injustice discourses as the most crucial element, both in academia but most importantly in the socio-political urban environment. Furthermore, there is a variety of op-

portunities to remove barriers, link places, and reduce inequalities, both through spatial and socio-political measures, which should become an integral part of urban development policy. Additionally, there is a need to enable more poly-directional exposure, tackle prevailing and reinforcing prejudices and grudges through better societal education and open discussion, as well as by making the government and society more accountable though defined and participation-based visions and action plans. Lastly, planners and architects have the responsibility to embrace and create new forms of co-existence in highly seclusive urban environments and develop typologies which can act as best practices and incorporate all society members' needs and requirements.

6.2 Further Research

On the other hand, academia can contribute by producing more conceptual and in-depth case studies in the context of the Global South in particular in relation to spatial injustice patterns. While South Africa has, for example, quite an extensive research body due to the long-lasting apartheid, many other countries face similar situations but are often left behind in regard to academic consideration. Additionally, more attention should be paid to best practices and successful initiatives in both social as well as spatial dimensions to create a better catalogue of knowledge which can be shared, tested, adapted, and reproduced. Lastly, there is still a limited number of approaches to analyse, visualise, and conceptualise spatial injustice in the real environment. While it should be impossible to create a sufficiently comprehensive tool or method to represent the actual situation, this should not be a reason for no more attempts to qualitatively and quantitatively create a more detailed knowledge resource as well as reproducible methods.

If both academia and practitioners award the topic higher importance, it should lead to a better understanding, more knowledge and resources, best practices, and finally also more political attention and acknowledgement – and therefore might even be able to reverse the global injustice trend.

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Thank you.