Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences
Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners ([Examencommissie-BK@tudelft.nl](mailto:Examencommissie-BK@tudelft.nl)), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

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<tr>
<th>Personal information</th>
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<tbody>
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| Location: | Nairobi Metropolitan Area |
| The posed problem, | Kenya’s short and intense history of urbanisation has led to a capital city that offers extreme diversity. While this diversity has led to staggering amounts of inequality, it is also the main driver for the city’s socio-economic energy. However, planning and design has historically been incapable of addressing this dichotomy. At the same time, research on the specific nature of African cities has mostly focused on the city’s social structure, failing to provide a solid backdrop for urban interventions. |

| research question and | MAIN RESEARCH QUESTION: How can Nairobi’s unique urban system in general and its dynamic structure of public space in particular inform urban policy and design addressing the |
challenge of radical inequality of opportunities within the city?

**SUB-RESEARCH QUESTIONS:**
1. What is the particular urban system of the city of Nairobi and how has it developed over time?
2. What is the dynamic nature of the public in the city in general and how is this reflected in space?
3. What constitutes the inequality of opportunities in Nairobi and why is this an issue of urban design and planning?
4. What action in terms of urban design and planning should be taken in order to address these challenges?

| design assignment with these results. |
| Building on the results of the theoretical research, the aim of the design assignment is to design a multiscale, adaptive development strategy taking into account the dynamic nature of the public realm of and addressing the problem of unequal opportunities in Nairobi. |

**NOTE:** for your ease of readability this document only contains a summary of the posed problem, the research objectives and the proposed result. The full text including ample examples of the research already conducted are available in the P2 report attached.

**ABSTRACT**

Drawing back on my experience of living in Nairobi, this thesis explores the city’s dynamic system of public space and tries to develop strategies that are capable of improving its role as a realm of economic, social and cultural integration.

Exploring the historical development of the city and its residents, I will argue that the notion of public realm in Nairobi is radically different from the ideals of public space discussed in traditional planning practice, mostly reflecting the European city.

In this context, it is Kenya’s multi-faceted migratory history and its leapfrogging into an urban society that has led to the development of a capital city that renegotiates the relationship between public and private, communal and individual on a daily basis. It is a city that works and thrives in spite and maybe precisely because of sprawling informality and absence of infrastructures essential to the western notion
of the city. At the same time, these same issues fuel the notorious inequality in the

city, whether in terms of spatial justice, access to public services or ethnic conflict.

In this system, which drives segregation into slums and gated communities, malls

and makeshift markets or golf clubs and informal pubs, the streetscape of the city is

the only physical space that is truly public, where people from all fragments of

Nairobi’s society interact while sitting in a matatu, buying their Daily Nation or

sending money through an M-Pesa Agent.

The objectives of this thesis are thus two-fold. The first aim is to get an in-depth

understanding of Nairobi’s urban structure in general and the mechanisms driving

public life in its streets, exemplified in Ngong Road, in particular. Based on this

research he will try to develop strategies capitalizing on the qualities of public space

in Nairobi, improving the city’s capacity for equal opportunity, social security and self-

actualization.

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**Process**

**Method description**

Considering the limited availability of recent literature and precedents on the city of Nairobi in particular but also African urbanism in general, the first key challenge will be to establish a solid theoretical framework, resulting in a ‘model’ for the city of Nairobi.

The basis for this model will be a review of some of the recent writing on the African city in general. A case study on the city of Nairobi, based in an analysis of historic primary and secondary sources. On a metropolitan, national and continental level conventional statistical analysis will further substantiate the results of the literature review. A comparison of my findings from this research will allow me to establish a model of Nairobi as the theoretical backdrop for all subsequent research.

The analysis of the challenges evident in the city and its model will of course have to be addressed through statistical research and mapping on all metropolitan scales. The main methodological challenge here is getting a hold of the data required. As in many non-western countries the reliability of official statistical data, if it is available, is questionable at best. In Nairobi, census data, while available for decades has been improperly digitalised, fails to take into account changes in the administrative division and most drastically, fails to take into account large parts of the informal city. In this context, web scraping of mapping applications such as Google Maps, the social media and the digital economy are valuable potential data resources in a country increasingly penetrated by the use of (mobile) internet. Covering very particular, individual aspects of urban life, they can support conventional means of mapping and data, particularly because they increasingly tend to include both formal and informal characteristics of the city.

In the spatial analysis of the public realm, which I will refer to as the streetscape, mapping alone is not fine enough a tool anymore in grasping its dynamic. A topological analysis in the sense of Christopher Alexander’s ‘Pattern Language’ seems like a fitting approach in understanding space that experiences constant renegotiations.

Since my research up to this point has focussed on an abstraction, my field work in Nairobi will focus on gathering footage capturing the complexity of the city’s urban system. In addition, interviews with experts will put my research into a local perspective.

After defining a precise perspective for Nairobi based on the analysis, research into possible tools and methods addressing the architectural and urban, but also non-spatial, legal and development challenges will lay the groundwork for the design interventions.
REFERENCES

BOOKS

- Barber, B. R. (2013). If mayors ruled the world: Dysfunctional nations, rising cities. New Haven, Yale University Press.
PAPERS

STUDIES, REPORTS & ARTICLES


DATASETS AND CODE USED FOR WEBSCRAPPING

Reflection

Relevance

‘Establish early on that your liberalism is impeccable, and mention near the beginning how much you love Africa, how you fell in love with the place and can’t live without her. Africa is to be pitied, worshipped or dominated. Whichever angle you take, be sure to leave the strong impression that without your intervention Africa is doomed.’

Binyavanga Wainaina in How to write about Africa

The main ethical question in the context of my project is of course my role as a non-African, non-Kenyan urbanist working in Nairobi. Because of colonial history and what some writers would call the perpetuation of colonial thinking one has to be aware of the sensitivities one will inevitably touch. The risk of being perceived as naïve (if you do slum upgrading), neo-colonialist (if you support Chinese infrastructure spending) or romanticising (if you accept the informality of housing and the economy) is omnipresent. It is, in fact, so strong that Rem Koolhaas and his team at Harvard, after years of research on the city of Lagos, decided not to publish a vast amount of work they had produced in fear of stirring too many emotions (Koolhaas and Adeyemi 2016). By consequence, in addition to a constant reflection on my role as an urbanist in Nairobi, it is essential to be able to back up my ideas with knowledge that has been produced on the continent, which I will do in the next chapter. like this I hope to be able to contribute to an open-minded, results-oriented discussion on the development of Nairobi.

The other main issue in terms of ethical relevance is to be seen in the context of recent political events in the country. With the annulment of the results of the 2017 general election in Kenya, a new chapter has been opened in what is a history of democracy riddled by violence and displacement in consequence of elections and power struggles. Ever since the first truly free elections in Kenya in 1992, ethnical violence and conflict over land ownership has broken out every time the public has cast their ballot. By consequence, internal conflicts around ethnicity and corruption are still a sensitive subject in political and academic discourse. Local scholars still find it difficult to write about some of the most pressing social issues of the country for fear of repression, lack of historical distance or difference of personal conviction. By consequence, every work addressing these issues, especially when produced by a foreigner, has to critically reflect the same. This is of particular concern in my case, since I openly address the issue of not only socio-economic segregation, but also the role of ethnic conflict to the formation of the city.
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Note: The activities are subject to change based on project progress and decision-making processes.