REFLECTION REPORT: Affordable Addis; increasing access to local income generation by promoting a productive open space system

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When I arrived at the Bole international airport of Addis Ababa almost all research that was done before the fieldtrip needed revision. The differences between the city in numbers, statistics, pictures and maps cannot be compared to the total package of sensorial experiences of the city. One of the most striking observations was the amount of people pretty much on every corner of every street. Way more than the official four million inhabitants estimated by the Ethiopian government. An observation that was confirmed during the stay by multiple experts. Given these realisations it presses even more for strategic interventions aimed at accommodating more inhabitants and integrating the housing with access to income generation.

Coming from a general interest in growing populations and the effect this has on city planning and the daily life of its low-income inhabitants to a design strategy for a specific neighbourhood in Addis Ababa was a long journey. The first months of the research project were dedicated to the theoretical background of informal urbanisation and social mobility. Looking back, it can be said that the research at that time was too general and the scale was too big. The aim was to construct a tool to identify locations in the metropolitan area of Addis Ababa where densification should happen and the smallscale design should show how this would happen. However due to the lack of sufficient and reliable data, the tool was not developed as planned. So the goal of the thesis was sharpened to identify how housing and income generation could be spatially integrated. Again, I stayed too long on the regional scale, also caused by the fact that the fieldtrip to Addis Ababa took place in February 2018. The fieldtrip changed almost the whole project again, another neighbourhood was chosen, spatial analysis prior to the fieldtrip needed to be adapted and many new insights and observations had to be considered and processed. All these changes are inevitable in a one-year project and even essential for a good process and product. I learned a lot from all the steps taken in the project, especially from the ones where I, looking back, took too long to draw conclusions and take decisions. I tried to take something from all those lessons and integrate it in the project. And thus, my mistakes contributed something good for the project, as well as for the final products.

The rest of this report will focus on the process of the whole thesis research. It starts with the societal relevance, the chosen methodology and universality of the results. The report continues with the discussion of the ethics and concludes with a discussion about the role of the urbanist.

Societal relevance

The project tells the story of the current rate of urbanisation and the related growth of urban poverty. Because so many people migrate to the city in search for a better life, generating an income within cities becomes the main issue for cities to address. The demand of housing growths accordingly with

the influx of migrants. In most countries adding to the already backlog of housing provision. There is a clear need for city governments and national governments to provide housing and income generation (or let people provide the income generation themselves). This thesis zooms in at the two issues addressed and aims at integrating both in the development of extension areas and the redevelopment of current living areas. Conducting research regarding the spatial integration of income generation and housing resulted in design strategies to tackle these issues for future development.

Methodology of the project

The methodology that was chosen consists of spatial analysis, theoretical and policy analysis and empirical fieldwork. The combination of these methods can contribute to a rich research part of the whole project. However, since the research was conducted in an African country multiple issues were observed regarding the reliability of the methodology.

Firstly, the spatial analysis, as said before, there was a deficit of reliable up-to-date and sufficient (spatial) data. Prior to the fieldwork, the mainly statistical data that was available was outdated, the data was gathered in 2007. The amount of data itself was limited and not all data was reliable due to other modes of data gathering and many missings amongst the data. Concerning the provision of geographical information, again there were almost no up-to-date maps of GIS data available and/or accessible. Therefore OpenStreetmap was used as a source, but since this is an open data method, not all geographical data was reliable or complete. I tried to overcome this by using satellite images as reference, with many shortcomings as well. Next to that I received some essential geographical information from Ethiopian students.

Secondly the policy analysis, issues observed here were that most of the policy documents were written in Amharic, thus depending on secondary sources describing those policies. In that process, information is lost as well as the objectivity of a policy document.

Thirdly the empirical field work. During fieldwork, observed problems were the biased observations and the 'lost in translation' issue due to the use of an interpreter. The lack of trust of local residents towards the researcher, was resolved by the interpreter who put the interviewees at ease before starting the interview. This conversation always took more than 10 minutes and of all the residents addressed only one resident did not want to do the interview. This could nonetheless have influenced the given answers. Another issue in line with the latter is that the government of Ethiopia can be viewed as an authoritarian one, having the effect that inhabitants of the country are hesitant to give their opinion in fear of repercussions. Especially since they view Western people as delegates from the Ethiopian government. Eventhough I met some Ethiopians who were quite critical on their own government, so the bias could be limited.

Finally regard concercing the empirial data is the bias by the researcher himself. Based on my own background I see and interpret observations in my own way. To make observations more objective, photo analysis was conducted. However it was not possible to take pictures of all the observations I made, due to the sensitivity of the inhabitants. I tried to overcome this by using pictures of others, for instance from architecture students who visited Addis Ababa as well.

Generalising the results

The aim of the research was to provide insight on the use of the open space in order to increase the access to local income generation. This research was conducted in Addis Ababa, Ethiopia and can therefore only directly be applied in Ethiopia. However lessons can be learnt, since many African countries follow the same path towards huge increases of urban population and urban poverty. Some

principles can therefore be used as starting point in other Sub-Saharan African countries. Extensive research on the specific countries and their culture is needed. Also important in this respect is that Ethiopia is the only African country (excluding Liberia) that was never officially colonised. This historic notion has a huge effect on governance, planning practices and socio-cultural dimensions. Which needs to be considered prior to the research and implementation of the proposed approach.

Within the context of Addis Ababa, the research on the Weyira sefer generates site specific design interventions, but also more general principles. The issues: lack of accessibility, solid waste, pollution, unreliable provision of public services and so on are general problems for the whole of Addis Ababa. Solutions proposed can be applied elsewhere. However specific issues regarding existing housing stock and topography vary across the city, so they need special attention. By using a more quantified approach and using a model to calculate footprints for specific programme, the possiblity of replicating the strategy increases. The model asks for specific parameters , for instance amount of inhabitants, that can vary with every sefer. Spatial analysis is needed to define the 'layer zero' consisting of the current socio-spatial dynamics, the landscape and the built environment.

Ethics

This section of the reflection report addresses the issue of ethics. In the case of this project one element stands out: the European scholar in an African context. Especially one who is only educated with European / North-American theories and approaches. As well as without any experience concerning research or design in the developing world.

I tried to overcome issues by talking with a lot of different people, from scholars to students to local residents. During the stay in Addis Ababa I learned a lot about Ethiopian culture and tradition and how this is embedded in daily life. An important example of this is the religion, this plays an essential part in the structure of the daily life and churches (as well as mosques) can be found in every small neighbourhood. Most of the times the name of the neighbourhood is derived from the church. That is something you can only experience by staying in the city for some weeks.

Some moments during the fieldwork, the interviewees expected that I would be able to really change things in their environment. This might have influenced the answers they gave to me in a sense that they exaggerated the issues. However it can also mean that they mention the issues that are the most important for them.

The last issue concerning ethics addresses the focus of the thesis project. The scope of the research is derived from current problems and theoretical notions, however the specific deduction is done by me. This can be a bias since my background influences the deduction as well as objective principles and concepts. So perhaps my research project addresses problems that are not the main problem or not the main priority for the low-income inhabitant of Addis Ababa. I am convinced of the relevance and the priority of the problem, thus passing along this view to others as well. Other issues might be more pressing, like the political situation in Ethiopia for instance.

Role of the urbanist

My role as an urbanist in this project, does not per se entail the role of the urban designer to produce specific designs. In my opinion that should be done by the community, aided by an urban designer. Which could be me, but then as an embedded researcher and designer. Right now, my role is to 'sketch' the design which can be filled in later by the residents of the sefer itself (helped by designers, engineers, NGO's and so on). After the first P4 moment I realised that I could perfectly show a design

and that I am needed to do so, in order to fully explain my vision and hypothesis. The design principles that were derived from the spatial, theoretical and empirical research need to tested on site. Which results in a design of key places in the sefer.

My approach as an urbanist is to be realistic as possible and to convince other stakeholders based on realistic, achievable goals. Convincing others was my greatest personal goal before the graduation process and is one of the most important of the many new things I learned at the TU Delft. During the year I sometimes experimented with the tools that the urbanist possesses to try to persuade others. Struggling to find my own style of communication. Learning a lot every day, also from my fellow students. And in the end coming to a style of communicating that suites me personally and that can be effective in presenting my strategy as the best possibility.

In my eyes it is best to stay modest as an urbanist, but it is also our role as urbanists to show other possibilities of development and design. But not per se adding the value of 'better', simply only providing alternatives to the current developments in Ethiopia.

New insights after P4_1

The realisation that many of the steps I had taken so far into the process lacked a written text or diagram. The steps were made implicit by me in my own head, but were never made explicit. This of course had effects on the structure and consitency of my thesis for my 'audience', but also for myself. Sometimes I lost track of my own thoughts and I could not fully explain why I made certain decisions, eventhough I did make decisions for a reason.

A crucial element in that sense was the design principles that I could base on "western' theory confronted with empirical data resulted. Added with references, though very limited, I could clearly derive principles to implement in the Ethiopian context.

Getting closer to the design came another insight that some design decisions I took were kind of random. Because of that, I started to quantify my design objectives and tried to integrate the performance and evaluation into the design itself. That resulted into the use of parametric design program Grasshopper, which was used to design the integrated transport and land-use plan and the designs of the locations. Bsed on this approach, I was able to show the key objective of my thesis from problem analysis all the way to the design and the evaluation of it.

But in the same line, adding that Addis is so diverse, for instance in landscape, height, current inhabitants and so on, it would require proper research for each individual site. However, in my opinion this should be the case for every plan, no plan can be copied and pasted into another area disregarding the specific conditions completely. I hope that the improved methodology for both the research as the design can result in a clear guideline to study other neighbourhoods in Addis Ababa adding to a more accessible and affordable Addis in the long run.