

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), 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:

Personal information	
Name	Roaida Alhashemi
Student number	4534603

Studio		
Name / Theme	Dwelling – Global Housing	
Main mentor	Nelson Mota	Architecture
Second mentor	Frank Schnater	Building Technology
Argumentation of choice of the studio	I want to work in developing countries when I am done with the BEP and preferably in Kabul (Afghanistan). This city deals with the exact same problems as Addis Ababa, so the assignment of this studio is for me a good exercise to prepare me for the reality in which I want to work later.	

Graduation project	
Title of the graduation project	Connecting the Tangible and the Intangible
Goal	
Location:	Kirkos, Addis Ababa, Ethiopia
The posed problem,	Newly built condominium sites are alienating and detaching people from the community and the neighborhood (UN Habitat, 2011).
research questions and	How to design social housing with a strong connection between the community and the neighborhood in Addis Ababa, Ethiopia?
design assignment in which these result.	A good neighborhood is defined by the social network of a community and architects, more then we might believe so, have a great impact on this (Chaskin, 1997). Having a social network within a community prevents us from metal and

	<p>even from physical illness (Halpern, 1995).</p> <p>Architectural design principles that can create or enhance the creation of a community (Sullivan & Chang, 2011):</p> <ul style="list-style-type: none"> - Create communal area's (preferably green areas) - Create neutral territories within building units itself - Create long visual sightlines so people can see what/where they are going to - Avoid lots of traffic within one space (this refers to all kind of traffic) - Create a mix of typologies (amenities) - Create target group specific architectural elements (churches, communal buildings etc)
--	--

The assignment of the studio is to design social housing in Addis Ababa, Ethiopia to meet the high demand of affordable housing in an urban context.

Process

Method description

To answer the research question the following methods will be used: typological analysis, auto-ethnography, literature review and field research (done by students in the previous years).

Typological analysis and the auto-ethnography study are mainly used in the preliminary research phase which are a direct input for the design hypothesis. These results are not presented in the research plan, but only mentioned because of their influence on for example the site selection, density, the meaning of dwelling etc. Literature review will be used to set the background, to give definitions to some of the terms used, and to shortly address the findings in other academic fields which also will impact the field of architecture. Lastly, field research (done by students in the in the previous years) will be used to elaborate on what a community means in a sefer and how the sense of a community is translated into physical forms.

Literature and general practical preference

For the literature review the following books/ reports are mainly revised:

- 'Perspectives on Neighborhood and Community: A Review of the Literature' by Robert J. Chaskin.
- 'Mental Health and the Built Environment: More than Bricks and Mortar' by David Halpern.
- 'Healthy and Community Design' by Lawrence Frank, Peter Engelke and Thomas Schmid.
- 'Stress, social support, and the buffering hypothesis' by Sheldon Cohen and Thomas Ashby Wills.
- 'Mental Health and the Built Environment in Making Healthy Places' by William C. Sullivan and Chun-Yen Chang.

These are the most important literature pieces which will be used in my graduation project and because of that elaborated on in my Research Plan. Besides these, there are also others which will be revised during my graduation project, but not mentioned here and only in the list of references at the end of my Research Plan.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The relation between the topic of my graduation project and the studio topic is that my graduation project is an answer to the assignment of the studio. The government of Ethiopia implemented since 2005 a so-called Integrated Housing Development Program (IHDP), which started off in Addis Ababa, the capital of Ethiopia. Among other goals, the goal of this program was to create 400 000 condominium units (UN Habitat, 2011). The principles behind these goals were to build houses on a large scale for people of the lower income groups within Ethiopia and with this to promote homeownership. Even though the goal of the 400 000 units was not reached within the five years that was set out for the IHDP, building low-cost houses at a very large scale was successfully achieved within this program, the costs of construction per m² was about 77 USD (UN Habitat, 2011). In the private sector this number would be 193 USD for the same quality.

However, the IHDP has encountered some design problems. The units and the urban design are not responsive to the needs, activities, and lifestyle of the occupants. The newly built condominium sites are alienating and detaching occupants from their community. 'Most occupants are accustomed to living close to the ground and so adjusting to life in multi-storied apartment blocks is proving a challenge.' (UN Habitat, 2011, p. 41) Living close to the ground means having space and a connection to the community (UN Habitat, 2011). The lost connection with the community and the neighborhood is the specific problem my graduation project engages with and exactly this is also the relation to the topic of the studio.

This is also the relation between my master track and design topic. I am following the track of Architecture, so I have to design social housing (=architecture).

The relation with my master program is that while doing all of the things mentioned above, I gain knowledge about architecture, urbanism and building sciences and this will prepare me for my role in society as an engineer and later on as an architect. Besides this and as mentioned above this assignment specifically will prepare me for my future dream job, which is working in developing countries and designing social housing for the urban poor.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework?

Affordable housing for all is a basic need as is described in the Sustainable Development Goal 11 (SDG) of the United Nations. Hence It is of crucial importance to ensure access to adequate, safe, and affordable housing for everyone everywhere. But what does 'adequate' and 'safe' mean? And specially in the field of architecture? Architecture for example plays an important role in our mental and physical health and hence it is relevant to ask the question: How does architecture play a role in this and to what extent? So, having a place to live is important, but also having a 'good' place to live is important and the literature on this topic is bulky.

This question (How does architecture play a role in our mental and physical health and to what extent?) has been asked many times before, but the answer is not always given with a design project and more specifically not in the context of Addis Ababa. This is relevant because Addis Ababa is the capital of a developing country, so the constraints that the graduation project deals with are big. In Addis Ababa, Ethiopia people are focused on the basic needs of a human being (SDG's), so the quality of these needs may sometimes be overlooked, as we saw with the newly built condominium sites. Whereas in the developed countries people are not so much focused on the SDG's, so the question 'How does architecture play a role in our mental health and to what extend?' is a different question, in those parts of the world. My graduation project fills exactly that gap, by asking the same question but for a different place and with the foreknowledge that community and neighborhood are determinant factors in designing 'good' architecture. So, this graduation project will contribute to the earlier mentioned bulky literature, by asking the same question, which is asked many times before, but with one big exception: what to do when the resources are limited and in a place where people's main focus isn't designing a strong community (or designing a healthy environment)?