

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	Wesley Lijkendijk
Student number	5059712

Studio		
Name / Theme	Methods of Analysis and Imagination - 'Positions in practice: Towards Inclusive Built Environments in Belgrade, Serbia'	
Main mentor	dr. Jorge Mejia Hernandez	Architecture, studio coordinator
Second mentor	ir. Pierre Jennen	Building Technology
Argumentation of choice of the studio	The absence of a specific design assignment and the wide possibilities to explore through different methods, but within the setting of an organized studio, motivated me to choose this studio. I hoped to get to know myself by investigating which approach to architecture is important to me. The possibility to subsequently end up doing a type of project which I did not expect to do in the beginning, was attractive here.	

Graduation project	
Title of the graduation project	Deponija's Thresholds of Homecoming
Goal	
Location:	Deponija, Belgrade
The posed problem,	<p>The Roma are the biggest minority in Europe. Although they have their own language and flag, they don't have their own state. Eighty percent of the Roma population lives below the poverty line. Their living circumstances are poor. On top, anti-Gypsyism, cumulative discrimination and prejudices towards this group still prevail. A large group of Roma (an estimated 150 families) lives in the informal settlement of Deponija. This settlement is part of the western part of the area called Ada Huja. On paper the settlement doesn't exist, since it is not drawn on the map. The settlement is located in the middle of a large area only occupied by several concrete plants. The area is located along the Danube river, which makes it a primary location. Based on the large commercial plans of the adjacent area, it seems only a matter of time before plans for the development of Ada Huja will appear. Therefore, the right moment to come up with a solution for this group of people seems to be right now.</p> <p>The plans that have appeared of the adjacent area are based on a similar strategy as the current development of another waterfront project: the Belgrade Waterfront. The Belgrade Waterfront project is controversial since decision making related to this project is concentrated around high-level politicians and the private sector, therefore it is also referred to as a top-top strategy. Instead of</p>

	<p>building for the Belgrade citizens, building for profit is the priority. With this in mind, it is almost certain that future development of Ada Huja would be equal to removal of the Roma settlement. Based on earlier cases, this would mean a relocation of the Roma to improved houses. However, this new location would be at the very edges of the municipality.</p> <p>This current way Roma housing is dealt with shows a number of problems. This approach does not seem to fully contribute to the improvement of the problematic position of the Roma in relation to meaningfulness, appropriation and integration. When the Roma are moved to another location, this vulnerable and marginalized group of people is even further segregated. They are taken away from the place that has meaning for them since they often already live there all of their life. Which was a place where it was possible to slowly appropriate land around their house, improve living circumstances and adapt the house to their way of life. Although those circumstances may in the end still be poor, and their living spaces barely be called a proper home, in this way it is possible for them to envision a better future. In addition to giving up their house, moving often also means leaving a more primary location where it was possible to earn some income. Furthermore the Roma, in this way, are put in a difficult position in which only they form the group that has to integrate and adapt.</p> <p>Instead, can we think about an approach in which the Roma population of Ada Huja is not seen as a problem in making plans for new development, but as a solution? This would be a plea in which diversity is embraced as an opportunity for a more inclusive environment. This calls for an attitude in which the Roma are kept on this location and are given an important role in future developments.</p>
research questions and	<ul style="list-style-type: none"> - How can family houses be designed on the basis of Roma lifestyle, combined with the characteristics of the notion of 'home' as described by Rybczynski, so that it is attractive for non-Roma to live in those houses as well? - How can the design of incremental housing create a balanced streetscape with urban density, that by being appropriated by their residents through time increases in quality and in turn leads to prosperity and reputation building of the Roma? - How can potential for homecoming – or human association – on the thresholds of different scales, be designed as a bottom-up strategy to give guidelines for the urban development of the western part of Ada Huja, and in that way stimulate gradual integration of non-Roma in the neighborhood?

<p>design assignment in which these result.</p>	<p>The design assignment is the design of more or less twenty (urban density) family houses as a basis for the creation of guidelines for a bottom-up strategy for gradual urban development of the western Ada Huja area. The family houses will be built according to the strategy of incremental housing and the design will be based on the Roma lifestyle. This strategy will be created based on the detailed design of a series of thresholds: the 'homecoming' on different scales. Starting with the smaller scale, this will create gradual transitions from the private room toward the urban scale.</p> <p>So, in starting with the minority, improving the living circumstances of the Roma population in Deponija will be the first step of developing the western Ada Huja area. After all, the families currently live in informal - often slum-quality – homes. Before non-Roma are integrated in the neighborhood, the Roma families need to meet minimum living conditions. The incremental housing strategy will offer them the possibilities to self-extend and upgrade their homes in a later phase.</p> <p>The biggest part of Ada Huja used to be part of the Danube river. The land is created in the seventies for and by its function as landfill. As a consequence, in contrast to the adjacent neighborhood, Ada Huja is a flat area. The location of the new houses will be within the borders of the plot of the current houses of the Roma. This means that the Roma are kept in the center of the western Ada Huja area, where they currently live. This creates an interesting challenge, since this enables the design of their houses to be a crucial node for the further development of the whole area. The housing will be built next to the current houses of the Roma. This will require a phased approach to the resettlement assignment. This approach will prevent the need for intermediate relocation, since in past resettlement operations, temporal relocation often ended up in long-term relocation in housing facilities that were designed for short-term use.</p>
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Process

Method description

The project consists of the design of (social) housing for a part of the Roma families living in the informal Roma settlement: Deponija. Incremental housing will be a strategy for this. The design of housing serves as a start of urban development (urbanism) of the western part of the neighborhood Ada Huja in Belgrade. The design will be based on research within different fields of knowledge. On the one hand there will be a sociological study on the local social structures in Deponija settlement and the lifestyle of its residents. On the other hand there will be an anthropological study regarding the global notions 'home' and 'homecoming', those notions are about the human interpretation of a material environment. The notion of 'home' will be used to reflect on the current living circumstances within the settlement. The notion of 'homecoming' in relation to a strategy developed during the first period, will serve as a way to focus on particular thresholds that are important for 'coming home'.

Home

The Roma of Deponija settlement currently live in informal, often slum-quality, homes. When making new houses, the very particular culture and lifestyle of the Roma must be taken into account. The book 'Deponija to the Better Future', can give an insight in this lifestyle. Qualities of this lifestyle may also be appealing to non-Roma people. Therefore, those increased-quality homes in the future may also be inhabited by non-Roma.

Rybczynski's explanation of home is: the presence of domestic comfort. The recognition of comfort involves physical, emotional and intellectual sensations. The current houses of the Roma lack in some of the attributes comfort is made out of to form a home. After investigating those lacks, Alexander's 'A Pattern Language' will give guidance to create comfortable homes (and context) based upon the Roma's habits and customs.

Incremental housing

The low prosperity level of the Roma creates a culture of self-extending of homes. This creates a great diversity, but also an incoherent streetscape. Through time, all available space becomes appropriated, resulting in little public space. Only physical borders or edges of public space stop the extensions. Guidelines are needed to get balance in public-private and to get a more unified appearance.

The architecture firm 'Elemental' developed the principle of incrementality. Build only the 'first half' of the house and create possibilities for expansion. In this, the designed part must be the part that is more difficult and cannot be built individually. Also focus must be on what will guarantee the common good in the future. This principle can deal with differences in prosperity and can through time raise people from social- to middle class housing.

Homecoming

Belgrade Waterfront Project is an example of a non-democratic development (top-top approach) that creates alienation. First plans for the area adjacent to Ada Huja are based on a similar approach. It seems only a matter of time until Ada Huja will be developed. This will most certainly lead to further segregation of the only citizens of this area, the poor and discriminated Roma. Instead of waiting for this to happen, they can be taken as a basis for new development. With non-Roma being integrated in the area as a second step.

On the thresholds of different scales, home, street, etc., homecoming appears. Identifying oneself with a place. According to Van Eyck, the identity of a place opens this place up for homecoming. And the role of the architect is to gain identity, to provide potential for human association... for homecoming. Our kiosk-research from the first period contributes to this. It learned us to see a subject as both an object (the homecome), implanted in a context (to homecome), and even something which can transform this context (homecomingly). So, the challenge is how to design homecomes that provide potential for homecoming as homecomely as possible on different scales.

Literature and general practical preference

Literature

Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King, I., & Angel, S. (1977). *A Pattern Language: Towns, Buildings, Construction (Center for Environmental Structure Series)*. Oxford University Press.

Aravena, A., & Iacobelli, A. (2016). *Alejandro Aravena: Elemental: Incremental Housing and Participatory Design Manual* (Bilingual ed.). Hatje Cantz.

García-Huidobro, F., Torres Torriti, D., & Tugas, N. (2010). *Time Builds!* Gustavo Gili.

Lammers, H. (2012, January). *Potentially...: Unravelling and reconnecting Aldo van Eyck in search of an approach for tomorrow* (Thesis). <https://research.tue.nl/en/studentTheses/potentially>

Macura, V., Vuksanović, Z., Jurašin, B., Đorđević, M., & Vasić, S. (2003). *Deponija to the better future*. (n.p.).

Rybczynski, W. (1987). *Home: A Short History of an Idea* (Reprint ed.). Penguin Books.

Precedents

PREVI Lima, Peru – several architects | incremental housing

Several projects – Elemental | incremental housing

ATBAR Afrique, Morocco – several architects | housing extended unplanned through time

New Mahala, Belgrade – Vladimir Macura (not executed) | Roma resettlement housing

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 ambition of the studio is to work towards inclusive built environments 'which are appropriable and meaningful to each and every individual in the city, and therefore foster integration among citizens'. Following this ambition, my project centers around the improvement of the problematic position of the Roma towards meaningfulness, appropriation and integration. The Roma being a group of people that up to today still suffers from cumulative discrimination and prejudices, which excludes them from society. In this, the housing situation of the Roma is the most visible form of their poverty. Considering how the problematic position of the Roma is in close connection to the housing circumstances, makes aware how architecture has a crucial role in improving not only the quality of their houses, but the quality of their lives. This also underlines the need to 'blend knowledge and skills from design practice, from the physical and social sciences, technology and engineering' towards more sustainable development, as the master programme states.

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

The project combines two problematic situations in Belgrade: the poor living circumstances of the Roma population, and large contemporary urban developments on primary locations that are often executed by the private sector. The project aims to develop a strategy towards inclusive development by taking the minority group of Roma as a basis. In this way, it can serve as an example for other situations on a range of other locations regarding both the treatment of minority groups and the development of primary located areas.