

# 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:

Personal information	
Name	Iris van der Moolen
Student number	5482887

Studio		
Name / Theme	Public Building   Public condenser, new urban lounge & commons	
Main mentor	Stefan Witteman	Project Design
Second mentor	Ger Warries	Building Technology
Third mentor	Sang Lee	Research
Argumentation of choice of the studio	<p>Throughout my studies, I have been interested in how architecture can respond to the city's and its users' needs through form, colour, materials and facilities.</p> <p>For instance, considering the corona pandemic, isolated home situations confronted people with their social needs. Need for a collective place where meeting and interacting are central, a physical place alongside the built-up digital communities.</p> <p>In my earlier design studios, I also had the opportunity to design multifunctional public buildings. However, I can still better develop myself in this field to create timeless and more sustainable designs. Within this studio, I want to investigate the critical factors for designing a well-functioning public building that all people feel attracted to and can relate to.</p>	

Graduation project	
Title of the graduation project	Media Heim Berlin <i>Mediatheque &amp; Community Lounge, Friedrichshain, Berlin</i>
Goal	
Location:	Berlin, Friedrichshain, Karl-Marx-Allee Süd

The posed problem
<p>After the fall of the Berlin Wall, Berlin's gentrification has grown significantly in former 'East' districts like Friedrichshain (Holm et al., 2013).</p> <p>However, in an area like Friedrichshain, gentrification brings many negative consequences in terms of social cohesion. Four significant effects of gentrification can be identified:</p>

1. Loneliness: With the arrival of event and entertainment venues, original, mostly ageing residents no longer associate with their neighbourhood (Holm, 2009). As a result, older people can no longer use their familiar social facilities and loneliness increases even faster (Davidson, 2008).
2. Segregation: Due to extensive modernisation of old buildings in areas like Weberwiese, rents go up and poorer households cannot afford them (Holm, 2009). This drives low-income residents out of their neighbourhoods, increasing socio-economic inequality and segregation.
3. Isolation and individualisation: In newly developed areas such as the south of Wriezener Bahnhof, large apartment complexes generate more individualism and isolation. Elevator access, undefined public spaces and the possibility of working from home reduce people's social interaction.

Ultimately, gentrification undermines the native culture and society, where transformations should take place hand in hand with existing conditions and demographics.

Essential target groups often ignored in gentrifying areas but with a high number of residents are lonely elderly, less affluent families and individual youth. Interviews conducted in Friedrichshain revealed that these target groups desire a safe place to entertain and learn. Older people need a place where they can reacquaint with their neighbourhood. They desire a place where they can pursue new hobbies and make new contacts so they are less likely to be alone.

Families driven out of the area by rising house prices are also unable to afford certain activities. Besides, in densely populated areas, there is little consideration for social space, and families do not want to give up their old home. Less wealthy families desire free activities within their familiar surroundings to meet up with old friends or neighbours, for example.

Finally, young people have faced the transition from a physical to a virtual online community. As a result, they spend more time at home and have fewer physical relationships. Consequently, 25% of Berlin's youth experience loneliness at times (Schumacher, 2019). For them, it is crucial to have a place where they can physically connect with peers and be in a broader environment than their home.

The design will therefore have the function of a public library that serves as an urban lounge where different generations can interact and cohabit.

## **Research Questions**

Main research question:

How can different media types form a new library typology that serves as a cultural heart between gentrifying neighbourhoods?

Subquestions:

1. How can a library be socially and culturally open instead of a typical individual and isolated object?
2. How can different generations help each other break up social isolation?
3. How can a public building mediate between the individual and the collective?
4. How can a media library adapt to the future enlargement of digital technology?

### **Design Assignment & Results**

The design aims to form a new central heart between an existing and new neighbourhood and their society. The public condenser should blur rigid divisions between neighbourhoods and enhance inclusivity and diversity.

A public function that facilitates different generations' recreational and intellectual needs is a library. Today's libraries already have a social function in addition to the intellectual purpose. In addition, Freeman and Braconi (2002) state in their 'Gentrification and Displacement; The Urban Prospectus' that if the availability of social services increases, changes in neighbourhood resources can be seen as 'positive elements'. In other words, adding social functions to existing services ensures that renewal and origin reinforce each other. Moreover, bringing different socioeconomic groups together reduces crime and disorder and enhances the collective sense of security (Vigdor, 2002).

The standard library will be expanded to include other media forms to anticipate the future. So there will not only be printed books in the building but also devices on which users can read digital books and listen to audiobooks. In addition, the media library will contain extra functions that activate the left and right hemispheres. Activities that activate the left hemisphere of the brain are more intellectual functions, such as offices, study rooms, reading rooms and debate rooms.

The right hemisphere responds to creative activities, such as crafts, painting, dancing and singing. The different types of media will connect the thinking and doing activities in the building through a guiding routing. Finally, in addition to the activities for thinking and doing, there will also be space for leisure and gathering. Traditional formal functions associated with a library will be transformed into more informal ones with room for both the individual and the collective. The negative space of the media library will serve as a living room for the community.

Four design principles are formulated to design a public library that serves as a central heart between contrasting neighbourhoods. Firstly, the building should be inclusive; the design will consist of different functions and users mixed through the building to create more interaction. Secondly, the design will enhance the visibility of activities, which will act as an invitation to enter the building and stimulate interaction with the surroundings.

Interaction is the third principle where the building will react on. To promote interaction, circulation will be the catalyst of social encounters. Prof. Dr Erik Scherder (2018) states that movement significantly improves our brain's 'executive

functions', the ability to take the initiative, plan things, control impulses and self-regulate. Lastly, the design must be flexible for future changes and user needs. Also, some functions will become redundant due to digitalisation and future technology. For the building to last longer than the life cycle of the functions, it is crucial to be adaptable to different activities.

In short, the media library will serve as an urban living room where different generations can interact and cohabit. In order to create a new central heart for contrasting neighbourhoods, the design will focus on diversity, visibility, interactivity and flexibility.

## **Process**

### **Method description**

Various research methods have been and will be used to answer the research questions correctly. For background information on Berlin and Friedrichshain, quantitative research was conducted in the first weeks. During the site visit, the data was extended with participant observation and interviews to discover who the commons and their needs in Friedrichshain are.

Qualitative research will be used to investigate the social and spatial effects of gentrification and the influence of public interiors in an urban context. Furthermore, qualitative research will also be used to explore the types of media used in existing libraries to find new media to read books with the help of future technology.

Moreover, plan analysis of contemporary libraries will be used to explore how a public library can be socially and culturally more open instead of a typical individual and isolated object. Additionally, the plan analysis will research how a public library can mediate between the individual and the collective and how different generations can work together.

### **Literature and general practical preference**

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Jaeger, P. T., Gorham, U., Taylor, N. G., Kettlich, K., Sarin, L. C., & Peterson, K. J. (2014). Library Research and What Libraries Actually Do Now: Education, Inclusion, Social Services, Public Spaces, Digital Literacy, Social Justice, Human Rights, and Other Community Needs. *The Library Quarterly: Information, Community, Policy*, 84(4), 491–493. <https://doi.org/10.1086/677785>

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## 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 social and spatial effects of gentrification already play a significant role throughout the architecture master track. At the complex projects msc1 studio called 'Dutch Change', I was commissioned to design an amateur art centre in the centre of Rotterdam. Rotterdam is also experiencing gentrification, leaving residents with few social places to go.

During the MSc 2 semester, I followed the design studio High Rise, an interdisciplinary studio between public building, dwelling and form studies. The assignment was to design a performative hybrid high-rise where housing, collective and public programmes are housed in one building. The reason for this assignment was that there is much housing shortage in cities like Amsterdam, but there also remains much need for public spaces.

Of course, this public building studio is also about public spaces in a densely populated city. However, the public condenser theme goes deeper into the social aspect and differs from the other studios' artistic, residential or commercial aspects. A public condenser attracts many audiences because it has more than one particular function. The building has more to offer than a media library; it is a public heart for intellectual, creative and leisure activities. This graduation project investigates how different socioeconomic target groups can help each other break up social isolation. It also examines how a public building can mediate between the individual and the collective.

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

Architecture today should be more than a beautiful aesthetic building or a well-detailed design. At a time when cities are becoming more densely populated, where there is a lot of housing shortage while housing is becoming more expensive, and where digitalisation is taking over from physical encounters, architecture is more about social character.

The need for public buildings will continue to be strong in the future. There is less space in the city to spread small public facilities, so a single multifunctional building is essential. However, it is crucial that future changes, such as digital technology, are considered when designing new public buildings. This graduation project investigates how a public building can positively use digital technology to allow different generations and target groups to work and learn together. It also examines how the building can anticipate future functions and user needs changes.

### **Planning**

After presenting the master plan, the defined programme and a schematic design with floor plans and cross-sections, the project will evolve over the next five months.

Between P2 and P3, the schematic design will be further developed into a preliminary design. The preliminary design will focus on floor plans, cross-sections, facades, and a facade section with schematic details.

After P3, the design will be further developed to a detailed level. The situation drawing, floor plans, sections and façades will be elaborated to a 1:100 level. In addition, part of the building will be worked out in even more detail, 1:50, and a facade fragment with corresponding details will clarify which connections the building holds together. By P4, the above products will already be completed, and some products will be further fine-tuned until graduation at P5.