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	Agnieszka Magdalena Trzcińska
Student number	5164206

Studio		
Name / Theme	Architectural Design Crossovers Heterogeneous City - London	
Main mentor	Alper Semih Alkan	Architecture
Second mentor	Freek Speksnijder	Building Technology
Third mentor	Agnes Van der Meij	Architecture
Argumentation of choice of the studio	Architecture is a unique profession, that brings closer multiple areas of expertise, not only within the built environment but also human sciences, technology and art. In this graduation studio, I would like to learn from these crossovers and further explore their effects on architectural design. Cities have always been a great source of inspiration and joy for me, therefore choosing London as a location for my graduation project was a natural decision. The theme of the studio- heterogenous city- highlights this complicated and fascinating relationship in an urban environment. The multi-dimensional conditions that formed through the accumulation of layers and time, reveal (or hide) a history of the place, influence the development and shape the atmosphere of the surrounding. I want to explore the freedom of designing and the power of imagination to change the environment for the better.	

Graduation project	
Title of the graduation project	Weaving the city - brownfield regeneration through sustainable urban manufacturing.
Goal	
Location:	London, Borough of Hackney
The posed problem,	Most European cities developed rapidly during the 19th and 20th centuries due to technological advances in the manufacturing industry. Mass production factories,

	extraction and processing sites, railway systems for transporting materials, storage spaces, and other supporting infrastructure highly influenced the evolution of urban areas. Like other UK cities, London underwent deindustrialization in the second half of the 20th century, resulting in offshoring production and focusing on the development of the service and finance sector. Previously a leader in production, the United Kingdom is currently dependent on imported goods and resources. Due to the consequences of environmental pollution and social exploitation, manufacturing has lost some of its appeals and disappeared in the urban context. The question arises on understanding whether manufacturing is still a vital thread in the pattern of the city. The abundance of physical objects, negative connotations to materialistic culture and excessive waste are some of the problems facing the production industry today. Is it possible for the making process to adapt to current conditions to restore regional production, focus on craftsmanship and increase the appreciation of local resources?
research questions and	Main research question: 1. How material practices in architecture can contribute to sustainable urban manufacturing? Following sub-questions that help to formulate an answer: 2. Why is manufacturing important to a city and its citizens? 3. What opportunities does an urban area give to manufacturing, in terms of resources, location and purpose? 4. How can a transition from linear to the circular flow of materials be enhanced in cities?
design assignment in which these result.	The goal of the project is to create an architectural proposal for the new material culture, concentrating on circular flows, knowledge sharing and experiences. The design assignments are: 1. Defining favorable site conditions and constructing a site in London. 2. Developing a masterplan and regeneration strategy. 3. Proposing an urban manufacturing facility, based on the exploration of industrial buildings typology in an urban context, with attention to transparency

	(in material and processes), light (health and natural environment) and interconnections.

Raising awareness of the source of everyday materials and explaining the processes behind it is an important direction of development. By being closer and interacting, consumers and producers can make a conscious choice about the source of everyday objects. The visible presence of craft and manufacturing results in appreciation of the material culture with its link to the history and heritage of London.

Process

Method description

A research method for my project, which I called weaving the city, will guide me through London, and the theoretical framework. I divided the research into four steps, each referring to the textile making process: gathering, sorting, spinning, and weaving, which will help me to structure the work.

The techniques I am using in research and design are literature review for gaining an understanding of the topic and positioning within the discourse, mind map for tracking associations between theories and precedents, categorization for clarifying and comparing areas of interests, diagramming for clarifying connections, cartographic mapping for identifying possible sites, photography for analyzing atmosphere, transect for understanding layers in time and space, graphic collages for showing visual ideas.

I am collecting all visual material in a research portfolio to keep an overview of the development of the project.

Literature and general practical preference

The starting point of my research was defining the fascination with manufacturing, material culture and circularity in an urban context. To clarify my position in the discourse, I established the primary literature for my research. Tim Ingold's texts provide an understanding of materiality from materials - centred perspective and prioritize processes of production over those of consumption. This view corresponds with Richard Sennet's argument that making is thinking and his notions on craftsmanship. I am weaving it with a cradle-to-cradle design framework developed by William McDonough and Michael Braungart. To construct my site of architectural intervention I am using a discourse on a networked territory by Lola Sheppard and reuse strategies of urban wastelands and vacant structures presented by Michael Ziehl. Finally, A Guide for 21st Century Cities of Making provides me with the necessary knowledge to better understand manufacturing opportunities and constraints in cities. This theoretical framework creates a base for a discourse on the relationship between the architecture of manufacturing, materiality, and site.

Literature:

Croxford, Ben, Teresa Domenech, Birgit Hausleitner, Adrian Vickery Hill, Han Meyer, Alexandre Orban, Victor Sanz Munoz, Fabio Vanin, and Josie Warden. 2020. Foundries of the Future: A Guide for 21st Century Cities of Making. Delft: TU Delft Open.

Ingold, Tim. 2012. “Toward an Ecology of Materials.” Annual Review of Anthropology 41 (1): 427–42. https://doi.org/10.1146/annurev-anthro-081309-145920.

Ingold, Tim. 2010. “The Textility of Making.” Cambridge Journal of Economics 34 (1): 91–102. https://doi.org/10.1093/cje/bep042.

McDonough, William, and Michael Braungart. 2002. Cradle to Cradle: Remaking the Way We Make Things. London: Vintage.

Sennett, Richard. 2008. The Craftsman. New Haven: Yale University Press.

Sheppard, Lola. 2013. “From Site to Territory”. Bracket 2 (Goes soft), 179-184.

Ziehl, Michael. 2012. Second Hand Spaces : Recycling Sites Undergoing Urban Transformation = Über Das Recyceln Von Orten Im Städtischen Wandel. Berlin: Jovis.

Precedents:

Blackhorse Workshop, London, UK, Assemble
Curtain Wall House, Tokyo, Japan, Shigeru Ban
De Ploeg factory, Bergeijk, the Netherlands, Gerrit Rietveld and Mien Ruys
RDM Innovation Dock, Rotterdam, the Netherlands, SPEE architecten
Texielmuseum, Tilburg, the Netherlands, cepezed
TU Delft Faculty of Architecture, Delft, The Netherlands
The Oxo Tower, London, UK, Lifschutz Davidson Sandilands

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)?

A complex urban environment is a great experimental field for an architect. Uncovering the layers, stitching various programs together, solving problems on an urban scale- these are a few actions that I have been working on, that give an overview of how intricate an architectural design can be. My graduation topic, weaving the city- brownfield regeneration through sustainable urban manufacturing, is revolving around production and material flows in an urban setting. It is a crossover between technological industrial processes and architectural built forms, joining design expertise in spatial layers and materiality with efficiency and logic of innovations. London, the heterogeneous city, is a diverse setting where many spatial, social and economic conditions intersect, creating a perfect testing field for new

urban typologies and connections. A comprehensive strategy for brownfield regeneration is combining expertise from fields of Architecture, Urbanism and Building Sciences. I strongly believe that the topic I have chosen brings positive value to my architectural education and contributes to scientific framework.

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

Cities are constantly transforming. Some might be visible right away, with examples of industrial revolutions, war bombings or large scale masterplans. Others are operating on a smaller scale, harder to pinpoint to one location, yet also important. A movement of integrating manufacturing in the urban environment seems to me as a vital process in activating and diversifying cities and in developing heterogeneous cities with mixed-use neighbourhoods, where people can expand their full potential and find their path in life. I hope that this graduation project can contribute to better understanding our heritage, possibilities and the natural environment, through showing the importance of making, craftsmanship and sharing knowledge. Overconsumption is at the root of the planet's environmental crisis and through education and changing the patterns of our behaviour we can positively influence the environment.