

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	Cedric Hietbrink
Student number	4598946

Studio	
Name / Theme	AR3AD100 Advanced Housing Design Graduation Studio
Main mentors	Harald Mooij Architecture
	Robbert Guis Architecture
Argumentation of choice of the studio	Whilst doing several different studios throughout my master, the possibility to design and change the everyday of people became ever more important in the way I thought about architecture and its impact. After having completed the MSC1 studio Fundamentals of Housing Design I expected the Advanced Housing Design graduation studio to be suitable to implement and design the everyday life of people.

Graduation project	
Title of the graduation project	Between a day and a lifetime
Goal	
Location:	The neighbourhood of Groenenhagen, situated in the area of Groot-IJsselmonde, Rotterdam, The Netherlands. This location is a post-war neighbourhood in the south-east of the city.
The posed problem,	The current housing crisis in the Netherlands, from which some say it has existed since the second world war, has decreased changes for vulnerable groups in the housing market to obtain suitable housing. Groot-IJsselmonde has seen few changes in dwellings and public space since its completion in the 1960's, leaving plentiful space for improvement. The urban fabric of the neighbourhoods provides opportunities to densify, activate the public space and to activate this area which can be seen as aged and socially struggling. Introducing differing dwelling types has the potential to improve the neighbourhood

	and provide appropriate housing for an often overlooked group; the short-stayers. Short-stay is the umbrella term for everything between a tourist that stays somewhere for a day and expat that lives in a place for one or several years, all with their own characteristics.
research questions and	<p>Research Question: "How can the rise of short-stay housing contribute to creating an urban densification strategy integrating the sharing economy in a post-war neighbourhood?"</p> <p>Sub-Questions: "How much are people willing to share?"</p> <p>"What have been the effects of the rise of short-stay housing on Dutch cities?"</p> <p>"What is the added value to the living quality of inhabitants in co-housing projects?"</p>
design assignment in which these result.	(re) design of an inclusive, innercity urban neighbourhood and residential project
<p>The design assignment aims at introducing vibrant spaces of sharing on the edges of the existing neighbourhoods to facilitate a resilient housing stock that enhances the usefulness and liveability of the green spaces and housing in Groot-IJsselmonde. This will be achieved through the transformation and addition of short-stay housing in the neighbourhood Groenenhagen, where leftover urban spaces and a uniform housing stock provide suitable conditions to introduce new types of housing. Different interventions, people and the broader area will be connected through elements of the sharing economy, such as sharing mobility or co-housing.</p>	
Process	
Method description	
<p>To come to a comprehensive design strategy, three forms of research will be used. Firstly, literature studies will be used to give a base from which design principles on sharing, short-stay housing and co-housing can be derived and implemented in the densification strategy for Groenenhagen. Secondly, data and policy documents on the sharing economy and short-stay housing in the city of Rotterdam will be used to be the connection between the theoretical and the real world, through which a viable densification strategy can be found. Lastly, case-study's on short-stay housing types, co-housing projects and post-war neighbourhood densification interventions will be used to derive functional design principles.</p> <p>The design will focus mainly on the different scales of sharing and how this affects relationships and the way the urban fabric and dwellings will be used. This will be addressed by continuously altering between the dwelling scale and the urban scale.</p>	

Literature and general practical preference

For the theoretical part of the studio the literature can be divided in three parts: sharing economy, short-stay housing and co-housing. For each of these parts, different relevant literature is found and could be used for the further exploration of the topics. Some of these will be

For the topic of the *sharing economy*, Görög, G (2018) researched "The Definitions of Sharing Economy: A Systematic Literature Review", providing a base for what is understood as being the sharing economy. Belk et al. (2017) give a critical insight on the positives and negatives of the broader sharing economy in their "Handbook of the sharing economy", whilst "My home is your castle, forecasting the future of accommodation sharing" (Gassman et al., 2021) gives a direct insight in how sharing affects accommodation and the market it sits in. Gruen, A & Mimoun, L. (2019) explore collaborative workplaces in "Guest, friend or colleague? Unpacking relationship norms in collaborative workplaces.", providing principles in collaborative processes which can be used for the design.

Short-stay housing is made up of many different target groups, in which "Expats, wanneer ben je het? Een afbakening van in het buitenland geboren werknemers op basis van loon" by Ooijevaar, J., Verkooijen, L. (2015) and "Buitenlandse kenniswerkers in Nederland. Waar werken en wonen ze en waarom?" by PBL (Planbureau voor de Leefomgeving) (2014) look at what the spatial situation of expats in the Netherlands is. More vulnerable groups such as recently divorced or economically homeless are looked at by Scheepers, A., Van Den Dries, L., & Wolf, J. (2022) in "Informatie, interventies en praktijkvoorbeelden Bij preventie van dakloosheid.", Lub, Y., & Luns, B. (n.d.). research by design in "(T)huis voor spoedzoekers, ontwerpen & onderzoek met statushouders.". The elements more directly related to short-stay housing are found in "A big data approach to map the service quality of short-stay accommodation sharing." (Ranjbari, M et al. (2020), "). Which came first, the gentrification or the Airbnb? Identifying spatial patterns of neighbourhood change using Airbnb data." (Rabiei-Dastjerdi et al. ,2022) and "Spend less and experience more: Understanding tourists' social contact in the Airbnb context." (Lip, P.M. et al. 2019). Case-study's on short-stay housing looking at projects such as The Collective Oak in England or The Student Hotel will provide insights in which elements in short-stay tend to be seen as valuable.

The housing type of *co-housing* will be explored both through literature and case-study's. In the literature, papers on "The effects of cohousing model on people's health and wellbeing: a scoping review." (Carrere, J., 2020), "*Senior Cohousing: A New Way Forward for Active Older Adults.*" (Cummings, S., 2019) and "The re-emergence of self-managed co-housing in Europe: A critical review of co-housing research." (Tummers, L., 2016) provide some theoretical background on co-housing, whilst case-study's on projects such as District 6 in Zurich, which have been researched extensively by others before, will be also looked at through my own lens to derive design principles from them.

Reflection

1. Within the master track of Architecture, I think all studios aim at designing holistic designs in which the social, ecological, structural and functional spheres are all accounted for. The produced designs aim at being relevant in the future, instead of it already being outdated at the moment of completion. My graduation topic, creating a densification strategy for a post-war neighbourhood by introducing short-stay housing by focussing on the sharing of amenities, fits to the studio topic, master track and master programme by positioning the topic in-between the different spheres, by not focussing entirely on one of them, but using a broader view on the way densification influences the different spheres.
2. Short-stay housing has, in the eyes of many people, a negative connotation to it, resulting in it being an underdeveloped topic in the combination of research - architecture. By positioning my graduation topic in-between research and architecture my aim is to gap this bridge and provide design principles that can be applied in projects touching upon similar topics.