

# 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	Stein Heier Johansen
Student number	5320534

Studio		
Name / Theme	Advanced Housing: Ecologies of Inclusion	
Main mentor	Olv Klijn	Design
Second mentor	Anne Kockelkorn Ferry Adema	Research Building Technology
Argumentation of choice of the studio	Interest in dwelling design, alternative housing models, urban design and the intersection between dwellings, shared space and the city.	

Graduation project	
Title of the graduation project	Beyond the Nuclear: Housing strategies for an inclusive urbanism
Goal	
Location:	Merwe-Vierhavens, Rotterdam, Netherlands
The posed problem,	The Netherlands is facing a housing crisis. It is widely assumed that we need to build a million more homes in the coming decades to meet the increased demands put on the market. A lack of supply and increased financialisation have led to price increases that are excluding a growing proportion of the population from accessing appropriate housing. Another imbalance in the supply of housing lies in the fact that we use our dwellings differently from before, and different to what they were originally designed for. The rapid acceleration of working from home fueled by the COVID-19 pandemic is changing the way we inhabit our spaces; the lines between personal and work life are blurring. Demographic

	<p>restructuring, a consequence of improved living conditions and decreased birthrates, is leading to more of us dwelling alone and increasing levels of loneliness and social isolation, particularly in old age. Loneliness is not a condition specific to the elderly, however, with increased measures of social isolation being a trend among the general population in western societies.</p> <p>Housing cooperatives have emerged as a potential remedy to many of the ills of the housing market. Generally compatible with financialised capitalism, cooperatives provide a third alternative in the market, outside of private-market commodified housing and state-sponsored social housing. Contemporary examples of housing cooperatives present a transitional understanding of the household, catering to a variety of living situations through the mixing of types such as cluster housing, shared apartments and more conventional apartments. Such developments in housing design (made possible by policy and activism) present a critique of the dominant market-driven dwelling type, and through its relative detachment from market logic, allow for increased flexibility in the assemblage of housing types and a potential foundation for a rethink of the levels of integration of productive and reproductive work that can coexist within a dwelling scheme.</p> <p>In an environment of changing life/work habits, shifting family norms, increased isolation and diminishing housing affordability, a look beyond existing dwelling propositions is needed to respond to the complexities of the contemporary condition.</p>
<p>research questions and</p>	<p><u>Main research question:</u> How can the production of shared spaces contribute to an inclusive urbanity?</p>

	<p><u>Sub-questions:</u></p> <ul style="list-style-type: none"> <li>- How can shared spaces in the port of Rotterdam be programmed to promote inclusivity of use?</li> <li>- How can shared spaces expand and extend domesticity?</li> <li>- How can dwelling types respond to new household types and changing work patterns?</li> </ul>
<p>design assignment in which these result.</p>	<p>Dwelling scheme that positively impacts its place through the production of both extroverted and introverted shared spaces connecting dynamic dwelling typologies and collaborative workspaces.</p>
<p><b>Process</b></p>	
<p><b>Method description</b></p> <ul style="list-style-type: none"> <li>- Case study analysis of collective housing designs.</li> <li>- Case study analysis of hybrid urban (mixed use) buildings.</li> <li>- Case study analysis of live-work dwelling types.</li> <li>- Literature review of collective housing, co-housing and housing cooperatives in Switzerland, Sweden and Norway.</li> <li>- Literature review of critique of dwelling types in the context of feminism and “non-heteronormative” household compositions in relation to dwelling design.</li> <li>- Literature review of work-live dwellings.</li> <li>- Experiential positionality: Use of own experience and informal interviews and observations to create personal narratives to position research and inform design propositions.</li> <li>- Site analysis/observational studies of site and urban context. Documentation and analysis through diagramming, sketching and photography.</li> <li>- Research-by-design: Iterative design exploring the intersections between dwellings, production and the city.</li> </ul>	

## Literature and general practical preference

### Precedent studies:

Vindmøllebakken, Helen & Hard (Stavanger, Norway, 2019)  
Haus A & M, Duplex Architekten (Zurich, Switzerland, 2015)  
415 Wick Lane, drmm Architects (London, UK, 2022)

### Literature:

#### Cooperative Housing & Co-housing

Palm Linden, Karin. *Kollektivhuset och Mellanzonen*. Lund: Byggnadsfunktionslära, Arkitektursektionen, Lunds Universitet, 1992.  
Fromm, Dorit. *Collaborative Communities: Cohousing, Central Living and Other Forms of Housing with Shared Facilities*. New York: Van Nostrand Reinhold, 1991  
Lengkeek, Arie, and Peter Kuenzli. *Operatie wooncoöperatie: uit de wooncrisis door gemeenschappelijk bezit*. trancity\*valiz, 2022.  
Balmer, Ivo, Jean-David Gerber: "Why are housing cooperatives successful? Insights from Swiss affordable housing policy," *Housing Studies* vol. 33, no. 3 (2018): 381  
Kockelkorn, Schindler, "Introduction" in *Cooperative Conditions*, 2021  
Dominique Boudet, ed., *New Housing in Zurich: Typologies for a Changing Society* Zurich: Park Books, 2017

#### Social Inclusion

Klinenberg, Eric. *Palaces for the People: How Social Infrastructure Can Help Fight Inequality, polarization, and the Decline of Civic Life*. New York: Crown, 2018.

#### Gender Equity

Giudici, Maria S.: "Counter-planning from the kitchen: For a feminist critique of type," *The Journal of Architecture* vol. 23, no. 7–8 (2018): 1203–29.

#### Ageing Society

Hauderowicz, Dominique, Kristian Ly Serena: "Who are the elderly? An introduction to ageing," in: *Age-Inclusive Public Space*, Hauderowicz, Ly Serena (ed.). Berlin: Hatje Cantz, 2020

#### Productive City

Holliss, Frances. *Beyond Live/Work: The Architecture of Home-Based Work*. New York: Routledge, 2015.  
Dick van Gameren et al. "Home Work City: Living and Working in the Urban Block", DASH No. 15, 2019

## 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)?

My graduation project topic is directly related to the discipline of architecture in so far as it pertains to the design of a mixed-use dwelling project with a focus on socio-spatial, urbanistic, environmental and technical aspects of such a project. The topic of alternative dwelling types and mixing of productive and reproductive spaces is a direct response to the premise of the overall studio theme ("Ecologies of Inclusion").

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

This project aims to continue the discourse on alternative dwelling propositions and urban mixing. Aimed at issues of housing affordability, social isolation and changing household compositions, the project deals directly with relevant social problematiques. The production of a realistic architectural proposition featuring a mixed-use dwelling/production programme is directly related to both academic theoretical discourse and practice of Architecture.