Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Shea McGibbon
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Studio	
Name / Theme	Dutch Dwelling
Teachers / tutors	Pierijn van der Putt, Theo Kupers
Argumentation of choice	I have a keen interest in both urban planning and
of the studio	housing. I believe that they are not only fundamental
	elements of the role of an architect, but increasingly will
	become more relevant in the near future as we focus on
	the renewal of inner-cities. My passion for design lies
	between the scale of the city and the building and the
	dwelling studio allows me to study an architecture of this
	interstitial scale. I have a personal motivation to gain
	expertise in this area of design and to build upon the
	experience I have gained both professionally and
	academically.

Graduation project	
Title of the graduation project	All for one, or one for all?
Goal	
Location:	Kattenburgerieland, Amsterdam
The posed problem,	The city of Amsterdam will experience a population boom over the coming years. This growth comes from the shifting population within the Netherlands to urban centres, along with increasing numbers of international expatriates working in the city. This will result in a need for more housing in the city, something which was once considered appropriate on the edge of the city but now will take place in the city-centre itself. It is therefore necessary to investigate the renewal of inner-city sites for residential uses.
	Added to this is the shift occurring with Dutch Culture. Once a welfare state providing for its population, the Netherlands is slowly stepping back from this position. Dutch citizens must again become individuals, more interdependent on one another and participatory within society instead of relying upon the state to provide for

them. In many ways this is perhaps an acknowledgement of a partial failure within the ideological condition of the Welfare state. As can be seen in many countries this socio-political framework elevated many out of squalor and deplorable living conditions, but was unable to deliver its ultimate utopian aims of an inclusive and open to all to maximize their potential and have the highest-possible quality of life.

In terms of housing this shift away from the state-provided model might well mean releasing all state-controlled housing to the open market, but as was seen in the United Kingdom this has profound implications. The right-to-buy scheme in the UK freed the government from the perceived burden of housing provision at the time but in the long-term resulted in both an affordability and provision crisis with private speculative developers controlling the market through supply and demand. In this light it is perhaps time to consider a new participatory model of housing provision that retains the core aim of delivering long-term affordable housing.

The housing estate of Nieuw Kattenburg is a Late-Modernist housing area consisting of many system-built slab buildings. This has been offering affordable housing and was built by the municipality of Amsterdam over fifty years ago. It is situated adjacent to a naval terrain which is now in the process of decommissioning and will be redeveloped as a clean-tech/startup campus. This is likely to attract many highly-educated young professionals to the city, aspiring to live close to their workplace. Given the transformation of the marine terrain, and the slow-sale of housing units within the estate to the private market it is clear that any future redevelopment of the area could well result in an extensive gentrification of the site, threatening the provision of affordable housing to low-income families within the city.

The intensification of existing residential sites within cities is much more complex than renewing non-residential sites. In the case of Kattenburg, low vacancy rates, high space standards, a strong existing community and high-quality construction make it difficult to see how a 100% density increase can be achieved without negatively affecting the existing residents. Moreover it is particularly challenging to understand how the redevelopment of the site can have any positive benefits for the residents that live there currently. In typical circumstances the

gentrification of such sites results in the demolition of the estate. With new buildings constructed for new residents at much higher price points, and as such displacing the existing population, eroding any social capital onsite. The challenge of this assignment is to uncover the spatial qualities of an alternative model of housing provision which manages, through densification, to deliver an equal number of affordable units onto the site as are currently present.

research questions and

How to increase the density of an existing neighbourhood to provide at least twice as many dwelling units as currently exist?

How to increase density whilst retaining as many existing buildings as possible?

How to increase density whilst also creating advantages and opportunities for existing residents?

How to develop a housing model which delivers an equal number of affordable units through renewal as are currently present?

How to combine the new, young-professional target groups with the existing community and create a merger of interests between their spatial requirements?

How increase density in a way which allows as many current residents to stay on-site throughout and after construction?

Design assignment in which these result.

Urban plan design with elaboration of one particular building as an individual detail design project.

The Individual building assignment will be chosen on the basis of a single urban block or fragment of the urban plan which best encapsulates the concept of this housing renewal strategy. This will be determined on the basis of the following points:

- How the building responds to site constraints
- The relationship to the redevelopment of the marine-terrain
- The relationship to Kattenburgerstraat and its future form
- The approaches to the transformation of the

existing buildings

- The diversity of dwelling units proposed within the building, and how this diversity relates to the retention of affordability and accommodation of new target groups
- Connectivity to and diversity of surrounding urban plan

Process

Method description

The project is based upon two concurrent activities, as well as input from the graduation research seminar studio and Research methods lecture series.

Group Site analysis:

Within the project the entire graduation group within the dwelling studio undertakes a collective analysis, documenting the existing situation, the history, present socioeconomic situation and the future ambitions of the city. Alongside this research into the topic of density will contextualise the living density of Amsterdam along with research into the key considerations and precedents for increased density in urban centres. Research to uncover transformation techniques from architectural projects will conclude this research and open up potential paths for the individual urban designs.

Thematic research:

The individual design will then be based upon this collective research, along with precedent, typology studies and additional research as is required to continue to elaborate the design. The position paper from the research methods lecture series will also strengthen the theoretical approach to design by relating the individual urban and architectural designs to known ideological bodies and fields of design.

Additional research into gentrification and its impacts in the city will contextualize the situation of inner city renewal in terms of its physical and social impacts. Cases such as the Heygate estate renewal in London, Granby Four Streets by Assemble Studio or Brooklyn New-York will set a social backdrop to the design, and their transformation strategies will be analysed to inform the development of the design strategy for Kattenburg.

Input from the Graduation Studio Research Seminar investigating the transformation of the Warwick and Cheltenham Estates in London has offered insights into council estate renewal strategies, specifically in terms of how to approach renewal whilst working with and around an existing community. Lessons learned from evaluating the techniques used in the transformations of these estates will be integrated into the design response to the Kattenburgerieland estate.

Literature and general practical preference

Boon, D and McGibbon, S. (2016) Trellick Tower Research Report

Cheltenham and Warwick estates, West London (Site visits and analysis)

Brand, S. (1994). How buildings learn; what happens after they're built. New York: Viking Penguin.

Ebner, P. (2009). Typology+: Innovative Residential Architecture. Zurich: Birkhäuser.

Hanley, L. (2007). Estates, An Intimate History. London: Granta Books.

van Kempen, R. Dekker, K. Hall, S. Tosics, I. (Eds.) (2005)Restructuring large housing estates in Europe. Bristol: The Policy Press.

Kristien Ring AA Projects (Eds.)(2015). Urban Living. Strategies for the Future. Berlin: Jovis Verlag GmbH.

Pocket Living (2014) Pocket Two-Bedroom Competition. London: Pocket Living.

Smithson, A. 'The Violent Consumer, or Waiting for the Goodies', in Architectural Design, May 1974, pp. 274-278.

The Collective – Millennial Co-Housing association, https://www.thecollective.co.uk/living.

Reflection

Relevance

The transformation of municipal mass-housing is a key issue in the growth of contemporary cities. With the shifting emphasis away from out-of-town growth to more compact, consolidated urban fabrics architects and planners must re-evaluate inner city conditions and find areas where it is possible to intervene to increase the density and livability of our cities. With this comes enormous complexity, inner city areas have problematic ownership and economic conditions, along with a high number of existing buildings. Intervening within this is a real-world challenge, but is still an emerging field within design. Specifically the densification and transformation of existing residential areas is a topic which has not been extensively explored within academic architectural design.

The emphasis of the project will focus on the synergies between the existing Kattenburg community and the new residents introduced to the area. It will explore strategies of densification without gentrification or displacement of the existing population. Moreover it is hoped that strategies are developed which use spatial devises to accommodate connections between these two groups, in time forming one larger Kattenburg community.

Time planning

MSc 4 (February 2015 – July 2016)

Week 3.1-3.8

Definitive Consolidation/New-build designation

Definitive dwelling typology solutions
Definitive volumes and structural design

Concept materialisation Concept interior spaces

Week 3.9 **P3 – Complete design presentation**

Week 3.10 – 4.5 **Finalisation of design:**

Definitive materialisation Definitive Construction Details Definitive interior spaces

Week 4.6 **P4 – Definitive design presentation**

Week 4.6 – 4.8 Final model

Week 4.8 – 4.10 Final posters and presentation

Week 4.10 **P5 – Final presentation of the graduation project**