

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	Maurizio Mauro Brenna	
Student number	4718143	
Studio		
Name / Theme	AR3A010 Heritage and Architecture – Adapting 20 th century housing	
Main mentor	Uta Pottgieser	Architectural Engineering + Technology
Second mentor	Telesilla Bristogianni	Department Materials, Mechanics, Management & Design (3Md)
Argumentation of choice of the studio	<p>While studying at the TU during my bachelor I learned about the importance of sustainability and circularity. And since history has always been of great interest to me, I chose to follow the minor course of Heritage and Design in the last year of the bachelor. The idea of adaptively reusing buildings is a very relevant solution to solve modern day challenges. The preservation of what was in combination of what can be, is very inspiring to me. Furthermore, it is a very interesting way of designing. By analyzing a buildings history the designer really gets to know the building. And any intervention in the already existing and therefore the past, requires a designer to detailed thinking. Moreover the Netherlands is facing a housing shortage and a lot of buildings which translate its history are demolished and replaced with new ones. This approach can sometimes be interpreted as superficial and in some cases seems to avoid adaptive reuse due to the required deep thinking.</p> <p>A combination of following previous courses of Heritage and Architecture and personal interest in this contemporary challenge and way of designing was the argument which led me to choose this studio.</p>	

Graduation project

Title of the graduation project	The preservation of intangible values and attributes in modern day heritage housing.
Goal	
Location:	Amsterdam Nieuw-West
The posed problem,	<p>The Netherlands is facing a housing shortage with a negative balance of 390.000 houses (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2023).</p> <p>However, according to the CBS (2023), only about 24% of new dwellings in Amsterdam are gained or created through renovation or adaptive reuse. Circa 76% of new dwellings are newly constructed.</p> <p>Post-war neighbourhoods represent a big part of the Dutch housing stock (Mens, 2019). The lack of protection of individual buildings of this time period has led to a decline of spatial and technical quality (Technische Univeriteit Eindhoven, 2023). This could lead to a loss of urban and architectural qualities which reflect the architectural trends of their time period (Technische Universiteit Eindhoven, 2023).</p> <p>Post-war neighbourhoods fell victim to social problems, which were used as underlying reason for large scale demolition- and renewal plans, in which there is little respect for the architectural qualities of these buildings. The economic crisis in 2008 interrupted these plans and opened up possibilities to revise policies. All meanwhile the recognition for heritage had increased (Mens, 2019).</p> <p>The increased heritage recognition shifted demolition plans towards refurbishment plans, wherein there is a need for systematic identification of heritage significance to inform refurbishment design plans (Technische Universiteit Eindhoven, 2023).</p> <p>Preserving intangible attributes in heritage housing is an important challenge in terms of contemporary urban development and sustainability (Havinga et al., 2019). There is a need to honour the social and cultural values embedded in post-war architecture, while tackling modern day urban challenges. And therefore there is a necessity of a thorough evaluation of the original qualities of post-war buildings to make well-founded decisions on possible interventions (Technische Universiteit Eindhoven, 2023).</p>

<p>research questions and</p>	<p>Accordingly to the problem statement, the following research question is defined:</p> <p><i>"How can intangible cultural heritage values and attributes be effectively identified, documented and preserved when adaptively reusing a building, while considering contemporary challenges such as changing social dynamics, urban development and sustainability?"</i></p> <p>Three sub questions will help to structure the research:</p> <p><i>"Which tangible and intangible cultural heritage values and attributes are embedded in the Architecture of Amsterdam New-West, and how can these be accurately identified and documented?"</i></p> <p><i>"What are contemporary challenges to consider whilst dealing with housing heritage?"</i></p> <p><i>"What design strategies and practices can be used to effectively integrate intangible attributes preservation into the conservation and restoration of heritage in Amsterdam New-West?"</i></p>
<p>design assignment in which these result.</p>	<p>The assessment of different design strategies regarding the preservation of tangible and intangible values and attributes in heritage housing. For each sub question there will be a different approach.</p> <p>Firstly the intangible values and attributes need to be identified and documented. A theoretical framework needs to be defined, in which the values and attributes (according to the users of the design case) can be categorised and easily tracked back when making design choices later on in the design phase.</p> <p>Secondly, it is important to consider current challenges when dealing with heritage. Challenges which complicate the process of the preservation of intangible attributes embedded in architecture nowadays, such as the insulation value of modern day housing.</p> <p>Lastly, existing strategies which have already been implied about dealing with housing heritage to get heritage housing up to modern day standards.</p>

[This should be formulated in such a way that the graduation project can answer these questions.

The definition of the problem has to be significant to a clearly defined area of research and design.]

Process

Method description

Interviews – The values and attributes (tangible and intangible), according to the residents of the design case, will be identified and documented through the theoretical framework deriving from literature relevant to the topic. In this case this will be the 'values framework' of Pereira Roders (2007) and the 'taxonomy of values' by Veldpaus (2015). This framework will help me answer the question as to 'what' attributes and values are important and 'why' these are important.

Literature analysis – A literary analysis will help discover modern day issues with heritage housing and contemporary challenges whilst dealing with housing heritage.

Documentative analysis – Documents regarding exemplary cases in the same urban area, in this case 'Bosleeuw Midden' and 'Klarenstraat', will help discovering already implemented strategies to deal with contemporary challenges and heritage housing.

Comparative study – Multiple already existing examples of adaptively reused heritage housing cases in Amsterdam Nieuw-West will be compared and evaluated to see which strategies address which problems.

By addressing these problems through these methods, the research question can be answered and a design strategy based on the results can be created. To then evaluate if the resulted design strategy assesses the research topic, there will be a reflection. Accordingly to the reflection the design strategy will help during the design phase later on in the graduation studio.

Literature and general practical references

Cambridge Dictionary. (2023). Attribute. <https://dictionary.cambridge.org/dictionary/english/attribute>

Cambridge Dictionary. (2023). Value. <https://dictionary.cambridge.org/dictionary/english/value>

Centraal Bureau voor de Statistiek. (2023). Voorraad woningen en niet-woningen; mutaties, gebruiksfunctie, regio. https://www.cbs.nl/nl-nl/cijfers/detail/81955NED?dl=6C571#OverigeToevoeging_3

Da Silva, A. T. P., & Roders, A. P. (2012). Cultural heritage management and heritage (impact) assessments. <https://research.tue.nl/en/publications/cultural-heritage-management-and-heritage-impact-assessments>

Dashboard Kerncijfers | Website onderzoek en statistiek. (2019). https://onderzoek.amsterdam.nl/interactief/dashboard-kerncijfers?tab=indicator&thema=wonen&indicator=LLEEFBAARBRT_R&indeling=wijken&jaar=2022&gebied=FM&taal=nl

De la Torre & Mason, R. (2002). Assessing the Values of Cultural Heritage (M. De la Torre, Red.). The Getty Conservation Institute. <http://www.getty.edu/gci>

Havinga, L., Colenbrander, B., & Schellen, H. (2020a). Heritage attributes of post-war housing in Amsterdam. *Frontiers f Architectural Research*, 9(1), 1–19. <https://doi.org/10.1016/j.foar.2019.04.002>

Havinga, L., Colenbrander, B., & Schellen, H. (2020b). Heritage significance and the identification of attributes to preserve in a sustainable refurbishment. *Journal of Cultural Heritage*, 43, 282–293. <https://doi.org/10.1016/j.culher.2019.08.011>

Jelic, A., & Stanicic, A. (2020). The Memory in Bodily and Architectural Making: Reflections from Embodied Cognitive Science. In J. Micieli-Voutsinas & A. Person (Eds.), *Affective Architectures: More-than-Representational Approaches to Heritage*. Routledge.

Kuipers, M., & de Jonge, W. (2017). *Designing from Heritage: Strategies for Conservation and Conversion*. Delft University of Technology.

Mens, E. H. M. (2019). Een architectuurhistorische waardestelling van naoorlogse woonwijken in Nederland: het voorbeeld van de Westelijke Tuinsteden in Amsterdam . [Dissertatie 1 (Onderzoek TU/e / Promotie TU/e), Built Environment]. Technische Universiteit Eindhoven.

Mi, L., Roders, A. P., Nevzgodin, I., & De Jonge, W. (2023). Values and Interventions: Dynamic relationships in international doctrines. *Journal of Cultural Heritage Management and Sustainable Development*. <https://doi.org/10.1108/jchmsd-10-2022-0178>

Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2023). Het statistisch woningtekort nader uitgelegd. Home | Volkshuisvesting Nederland. https://www.volkshuisvestingnederland.nl/onderwerpen/berekening-woning_bouwopgave

National Trust. (2017). Places that make us. <https://nt.global.ssl.fastly.net/binaries/content/assets/website/national/pdf/places-that-make-us.pdf>

National Trust (2019). Why places matter to people. <https://nt.global.ssl.fastly.net/binaries/content/assets/website/national/pdf/why-places-matter-to-people.pdf>

Technische Universiteit Eindhoven. (2023). A Future for Post-War Housing. <https://www.tue.nl/en/research/research-groups/living-cities/architectural-history-and-theory/a-future-for-post-war-housing>

UNESCO. (2012). Preserving our heritage. UNESCO. <https://en.unesco.org/content/preserving-our-heritage>

Veldpaus, L. (2015). Historic urban landscapes : framing the integration of urban and heritage planning in multilevel governance. [Phd Thesis 1 (Research TU/e / Graduation TU/e), Built Environment]. Technische Universiteit Eindhoven

Reflection

1. The relation between the graduation topic: 'The preservation of intangible values and attributes in modern day heritage housing' and the studio topic: 'Adapting 20th century housing', is the intent to adapt 20th century post-war housing into housing which meets today's living standards and contemporary challenges. By doing so the main goal is to preserve what people value most, mostly the intangible. This relates to memories and life experiences linked to a building, which could get lost when changing/adapting the building. The intangible gives meaning to the tangible, so it is really the intangible values and attributes which should be preserved when adapting 20th century housing. By preserving the intangible, the tangible maintains its value even when adapted or changed. This way housing heritage gets preserved when asked to deal with post-war architecture and preserving architectural qualities from a period of time important to the identity of the place. Furthermore, by doing research on this topic, it shows the implementation of scientific and theoretical research in the design.

2. The relevance of my graduation work is to involve multiple stakeholders in preserving which has value to them. By interviewing residents, as the designer, consideration of the end-user perspective and an attempt to not only use the vision of a as so called specialist on the matter, but also the perspective of what the users of the end product value. Doing this research shows a strategy of working and dealing with heritage, in which the building should adapt, whilst preserving that what is valuable to the people which defines the building as heritage in the first place. The graduation work tries to use engaging methods when dealing with heritage to create a more wholesome values-based end product. And by doing so, this graduation project helps to add to the development of methods of more engagement during such practices.