

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	Tim Kornelis van Iwaarden	
Student number	4995554	
Studio		
Name / Theme	Heritage & Architecture / Transitional Identities: reassembling the spolia of social	
Main mentor	Christopher de Vries	Architectural Design
Second mentor	Lidwine Spoormans	Architectural research
Argumentation of choice of the studio	<p>Heritage is an increasingly significant topic in contemporary architectural discourse. Decisions regarding what elements of the built environment are preserved and maintained, transformed or destroyed for future generations are deeply tied to architectural practice. The studio, "Heritage & Architecture: Transitional Identities, Reassembling the Spolia of Social," offers an opportunity to engage with these questions, particularly focusing on buildings and structures that are not formally recognized as monuments.</p> <p>The studio's emphasis on rethinking heritage through the lens of social and architectural transformation interests me. It challenges conventional preservation practices by interrogating how architecture can actively shape the identity and "publicness" of spaces. This aligns with my research focus on how tectonic and material expressions in architecture can foster meaningful public realms.</p> <p>By addressing the interplay between heritage, identity, and social functionality, this studio provides a framework for exploring how architecture can contribute to a more inclusive and dynamic understanding of the built environment. Its combination of theoretical inquiry and design practice offers a platform to investigate these issues and their implications for the future of architectural heritage. What also influenced my choice was that I enjoyed the last studio hat Chris de Vries ran at the Heritage & Architecture section.</p>	

Graduation project	
Title of the graduation project	Public Tectonics: Reevaluating the Tectonic Expression of the Public Realm in Amsterdam-North's Molenwijk
Goal	
Location:	Molenwijk, Amsterdam.
The posed problem,	<p>Amsterdam is experiencing rapid population growth and a critical shortage of space, putting increasing pressure on its urban fabric (De Jong et al., 2019). In Amsterdam-North, these dynamics are compounded by gentrification, which often results in the displacement of long-term residents, the erosion of local identity, and the rise of placeless architecture that fails to reflect or serve the community it inhabits (Savini et al., 2015). Across Amsterdam-North, one striking observation is the stark contrast between civic architecture and residential buildings. While the neighbourhoods are dominated by large, uniform apartment blocks, the civic centres either occupy small, unassuming pavilions with little architectural expression or are housed in structures that have lost their original function and relevance. This contrast is particularly visible in Molenwijk, a modernist neighbourhood characterized by its rigid modernist spatial layout, which limits spatial opportunities for community interaction and cultural integration. This disconnect in scale, materiality, and spatial presence highlights a missed opportunity to create meaningful public spaces that act as platforms for interaction and belonging. Instead, these spaces often lack the tectonic qualities needed to foster a "space of appearance" where community life can unfold.</p> <p>Architecture and urban planning in such contexts often prioritize immediate needs and functional efficiency,</p>

	<p>neglecting the deeper, long-term goal of fostering meaningful public spaces (Frampton, 2024). By focusing solely on solving immediate problems, such approaches risk reinforcing placelessness and failing to provide spaces that support a sense of belonging, identity, and collective life. Without thoughtful interventions that emphasize the tectonic dimension of public architecture, neighbourhoods like Molenwijk remain vulnerable to fragmentation and the loss of cultural identity.</p>
research questions and	<p><u>Main Question:</u></p> <p>How can the tectonic culture of the Molenwijk be appropriated in civic center design to create a space of appearance that is representative of the urban identity of the Molenwijk?</p> <ol style="list-style-type: none"> 1. Which ideas concerning urban planning were fundamental when the borough of Molenwijk was designed? 2. Which architectural design ideas were fundamental for the design of the Molenwijk? 3. How do the tectonic traditions as found in Molenwijk articulate the design ideas of the borough? <ol style="list-style-type: none"> 3.1 What tectonic traditions are found in typical housing block design in the borough of Molenwijk? 3.2 What tectonic traditions are found in civic centre design in the borough of Molenwijk? 3.3 How do the tectonics expressions relate to the design ideas fundamental for Molenwijk?

	<p>4. How does the space of appearance manifest itself in the borough of Molenwijk?</p> <p>4.1 How do the public facilities in the borough of Molenwijk interact with their surroundings?</p> <p>4.2 How could these public facilities be represented to foster more <i>action</i>?</p> <p>5. How can the tectonic culture(s) of Amsterdam-North be (re)used to become representational for a space of public appearance?</p>
design assignment in which these result.	<p>This thesis explores how tectonics can serve as a medium for expressing the "space of appearance" within the public realm. Through an analysis of Molenwijk's urban fabric and the role of civic architecture, it seeks to propose design strategies that bridge the gap between residential and civic spaces. By emphasizing material presence, spatial articulation, and the cultural resonance of architecture, this research strives to reimagine public spaces as inclusive platforms that reflect the diverse and evolving identities of the communities they serve.</p> <p>This will result in the adaptive reuse of the parking garage, a central feature in the Molenwijk Plan, into a civic center. This is done through adding and taking away volumes in order to improve recognizability, transparency, durability and flexibility. A various share of extra program will be added, focused mainly, but not exclusively, on different modes of mobility in order to sustain the loss of parking space. This approach tries to accommodate the transitional period that automobile locomotion is currently experiencing in Dutch cities. Furthermore, the tectonics of the new</p>

design will be analyzed in the same manner as the analysis of the existing, through constant inflection, to achieve a rooted architecture that fights against the placeless design.

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

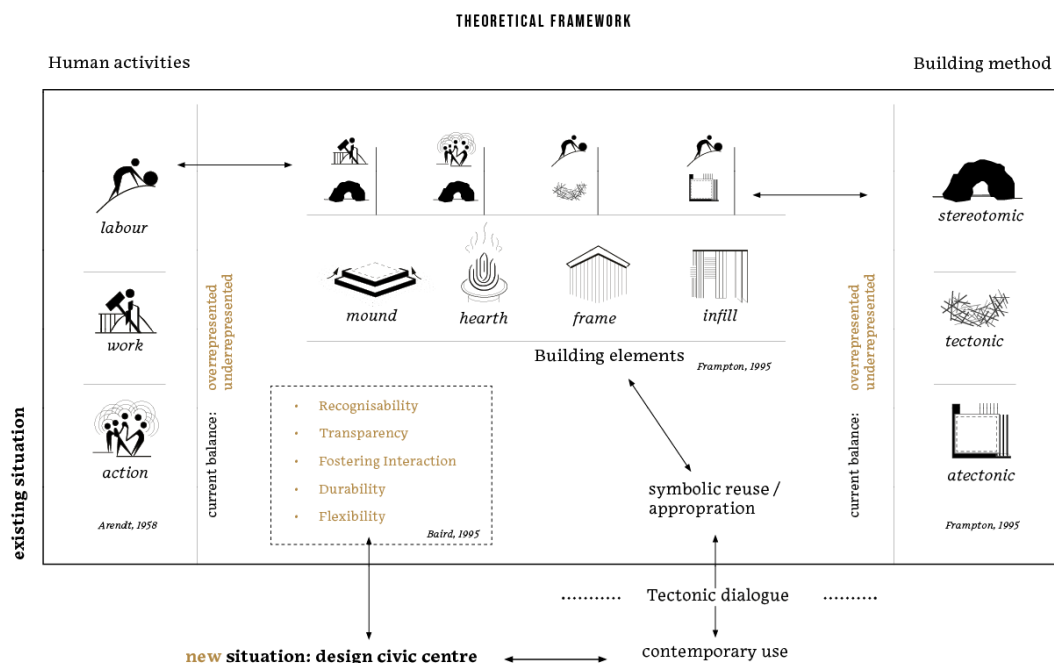
The definition of the problem has to be significant to a clearly defined area of research and design.]

Process

Method description

Theoretical Framework:

The first step of this thesis was to construct a relevant framework for understanding and critiquing public space. The theories from *The Human Condition* (Arendt, 1958), *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture* (Frampton, 1995), and *The Space of Appearance* (Baird, 1995) form the theoretical foundation for understanding built form and its effect on public space as a space of appearance. This framework not only serves as an analytical tool but will also be simplified to initiate the design process, ensuring that the resulting design aligns with the criteria established by the framework.



Research Methods

The research will employ qualitative field research, historical research, analytical drawing, architectural documentation, urban mapping, and spatial diagramming

(Groat & Wang, 2013).

Additional Research:

A typology book was collaboratively created with studio members, featuring four civic centres per member—three from Amsterdam-North and one international example. This was one of the first steps in the research process and provided a valuable head start for the studio by offering comparative insights into civic centre design. These examples enriched the understanding of the type as found in Amsterdam-North and informed the subsequent stages of analysis and design.

Methods to Address Research Questions:

1. Which ideas concerning urban planning were fundamental when the borough of Molenwijk was designed?

2. Which architectural design ideas were fundamental for the design of the Molenwijk?

Archival research will explore the design of the borough and the oeuvre of its architect/planner. Data will be collected from Het Nieuwe Instituut (The New Institute) in Rotterdam, the Delpher online newspaper archive, and Amsterdam's public archive. Literature research will contextualize urban planning leading up to Molenwijk's realization in 1968. Photographs of Molenwijk from these archives will also support the analysis. These data will provide a narrative for analysing

3. How do the tectonic traditions as found in Molenwijk articulate the design ideas of the borough?

3.1 What tectonic traditions are found in typical housing block design in the borough of Molenwijk?

3.2 What tectonic traditions are found in civic centre design in the borough of Molenwijk?

3.3 How does the tectonic expression relate to the design ideas fundamental for Molenwijk?

Archival research into Molenwijk's building methods will complement findings from question 1. Relevant data will be retrieved from the municipality of Amsterdam's bouwdossiers database. Architectural documentation of buildings (facades, plans, sections, and details) will be digitized and presented in isometric and axonometric views for tectonic analysis.

Frampton (1995) will provide a framework for analyzing building traditions in Amsterdam-North's Molenwijk. Buildings will be categorized into Gottfried Semper's four elements of architecture (Hearth, Roof/Framework, Infill Wall, Mound) (Frampton, 1995). Each tectonic element will be classified as stereotomic, tectonic, or

atectonic, providing a basis for discussing Molenwijk's building traditions.

4. How does the space of appearance manifest itself in the borough of Molenwijk?

4.1 How do the public facilities in the borough of Molenwijk interact with their surroundings?

4.2 How could these public facilities be represented to foster more action?

To analyze the current space of appearance in Molenwijk, the relationship between architecture and human activity will be assessed. Arendt (1958) will guide the categorization of human activities, while Baird (1995) will help translate these into architectural terms.

Methods include urban maps (showing flows of people and cars), drawings (illustrating vistas, entrances, and accessibility), site observation, informal interviews, and photo documentation. These strategies will provide qualitative insights into public facility usage and their spatial interaction with the community. Data from the bouwdossiers database will further support this analysis. The frameworks of Arendt (1958) and Baird (1995) will structure the discussion of Molenwijk's space of appearance.

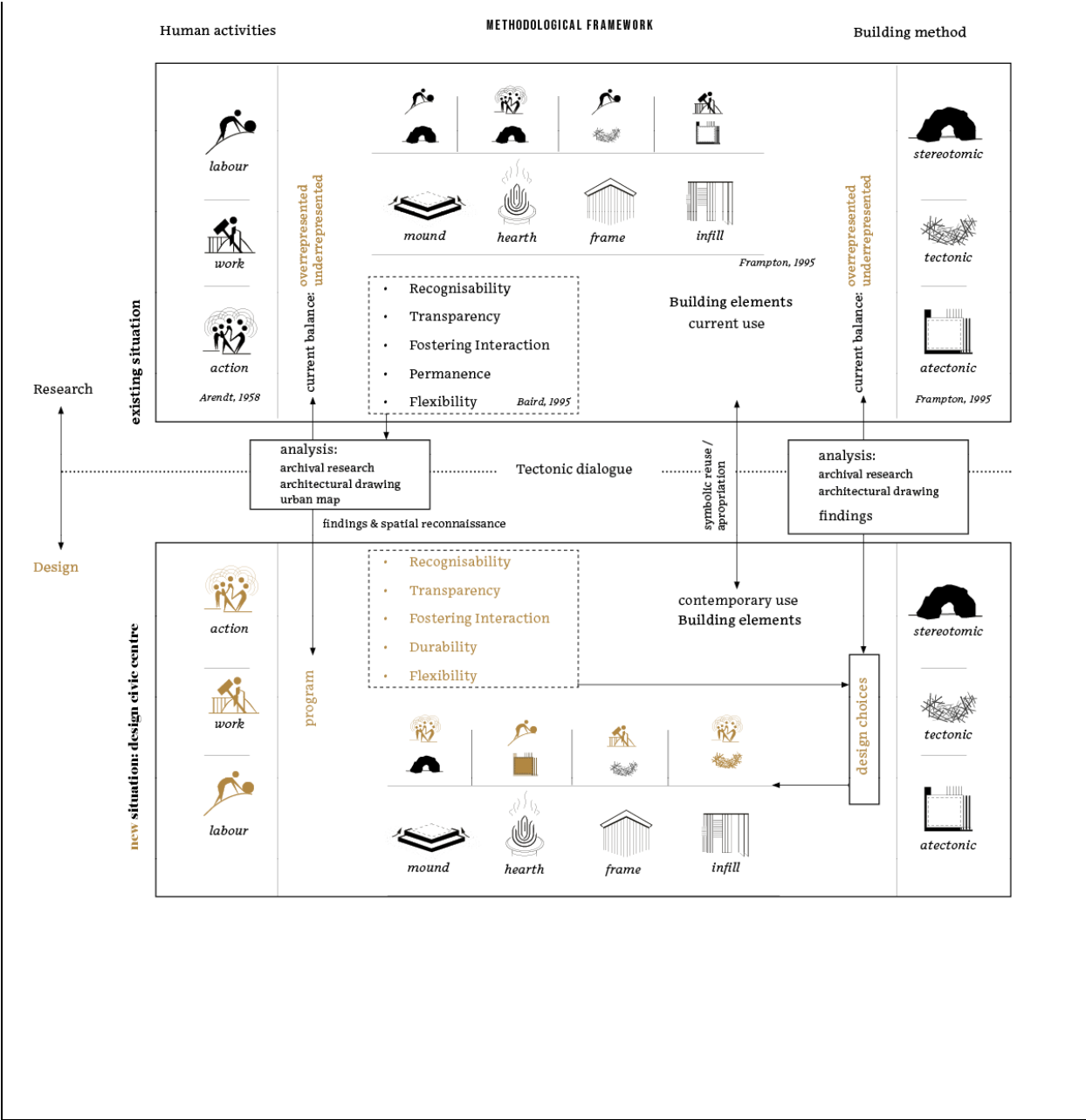
5. How can the tectonic culture(s) of Amsterdam-North be (re)used to become representational for a space of public appearance?

The framework critiques the existing structure and informs new design proposals. By analyzing human activities, a program can be developed to supplement, alter, or enhance existing activities in the neighbourhood. Symbolic construction methods will articulate the design's response to current shortcomings or strengths, fostering recognisability and transparency.

Schematic iterations of stereotomic, tectonic, and atectonic applications will test design strategies. Flows of people, cars, vistas, entrances, and accessibility will be integral to the design process. Arendt (1958) will guide program assignments, linking specific building methods to human activities (e.g., sports facility => labour => ephemeral => tectonic).

Design and Theoretical Framework:

The theoretical framework serves as a foundation for the design process, enabling a critique of the existing urban fabric and guiding new interventions. However, the design process itself also becomes a tool to critique the theoretical framework. Through design, shortcomings in theoretical assumptions may be exposed, offering opportunities to refine and expand the framework. This iterative relationship ensures that both theory and design inform and challenge each other, fostering a dynamic and comprehensive exploration of the research questions.



Literature and general practical references

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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)?

This thesis investigates how the tectonic culture of Molenwijk, a modernist neighbourhood, can be appropriated in civic centre design to create a space of appearance that reflects urban identity and addresses the challenges of placelessness and cultural fragmentation. This aligns with the studio’s focus on heritage, architecture, and social transformation, exploring how architectural interventions can reinterpret and adapt existing structures to evolving identities and the public realm.

This thesis reimagines the role of infrastructural built form through the adaptive reuse of a parking structure, transforming it into a civic centre that fosters social cohesion and redefines public space. It uses architectural design as a medium to highlight experiential qualities of space and materiality. This approach aligns with the Architecture track’s emphasis on addressing societal challenges through spatial and material exploration. Furthermore, the broader MSc programme’s interdisciplinary approach is reflected in this thesis’s connection between urban planning, architectural design, and the social dimensions of public spaces, making a meaningful contribution to discussions on the future of urban living.

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

This thesis bridges the gap between architectural theory and practice by applying concepts from Frampton's "Studies in Tectonic Culture" (1995) and Baird's "The Space of Appearance" (1995) in a real-world context. By integrating tectonic analysis into the adaptive reuse of Molenwijk's automobile-centred infrastructure, it critiques modernist priorities of necessity over spaces for public action. Drawing on Hannah Arendt's *The Human Condition*, it highlights how architecture can reclaim public spaces for collective identity and action. Perspectives from Markell and Teerds reinforce the role of contingency, ethics, and public dialogue in shaping spaces that align theory with practice, contributing to both academic discourse and practical design solutions.