

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	Zoi Despoina Papaoikonomou	
Student number		

Studio		
Name / Theme	Interiors Buildings Cities Independent Group	
Main mentor	Prof. Daniel Rosbottom	Architecture design and theory
Second mentor	Mark Pimlott	Architectural theory and research
Third mentor	Koen Mulder	Building Technology
Argumentation of choice of the studio	<p>-To study the Athenian Polykatoikia Building and to redefine its design in modern Athens having greater freedom in the choice and formation of the subject.</p> <p>The term Poly-Katoikia, literally "multiresidence" is a composite word, from poly, translated as multi, and the noun katoikia, dwelling. The construction is built with reinforced concrete. In 1929, two important laws concerning apartment buildings took effect. The law about "horizontal property" made it possible for many different owners to own one apartment building, each by owning one or more apartment units. Theoretically, each apartment corresponds to a percentage of the original plot. The most important effect of this law was the practice of "αντίπαροχή" (<i>antiparochi</i>, literally "a supply in exchange"). With <i>antiparochi</i>, the owner of a plot, who can't afford to build an apartment building by themselves, makes a contract with a construction company so that the latter will build the apartment building but keep the ownership of as many apartments as the contract states.</p> <p>-To highlight the virtues of Greek urbanism and to learn from a model of multi-residential architecture that has been working and evolving for almost a century.</p> <p>- To study the subject of my choice through the lens of interior design and under the guidance of this specific team.</p> <p>-Coexistence with other students and exchange of ideas and feedback.</p> <p>- To investigate collective tactics in a city where ownership and individuality prevail.</p> <p>-To learn from the long tradition of the Netherlands and other European standards in housing and have the opportunity to revisit the archetypes in a modern way.</p>	

Graduation project

Title of the graduation project	Custom-made Polykatoikia tapestry of shared ownership.
Goal	
Location:	Exarcheia, Athens, Greece
The posed problem,	<p>The Athenian Polykatoikia, a distinctive form of apartment building that has defined the city's urban landscape since the mid-20th century, faces numerous challenges today. Addressing these issues requires a nuanced understanding of both architectural and social dynamics, as well as innovative solutions that can redefine and redesign Polykatoikia for contemporary needs.</p> <p><u>Ownership status</u> One of the primary issues with Polykatoikia is the fragmented ownership structure. Many buildings are co-owned by multiple parties, which complicates maintenance, renovation, and decision-making processes. This disjointed ownership can lead to neglect and deterioration of buildings as consensus among owners is often difficult to achieve.</p> <p><u>Lack of collective spaces cultivating an ethos of extreme individualism</u> Polykatoikia buildings traditionally lack common areas that encourage community interaction. This architectural design fosters an ethos of extreme individualism, where residents may feel isolated despite living near one another.</p> <p><u>Isolation</u> The physical and social isolation in Polykatoikia buildings is exacerbated by their design and the urban environment. Many residents experience a sense of detachment from their neighbors and the broader community. Addressing this requires rethinking the building layouts to promote social interaction and connectivity.</p>

	<p><u>Gentrification</u></p> <p>Athens is undergoing significant gentrification, particularly in neighborhoods with a high concentration of Polykatoikia. This process often leads to the displacement of long-term residents as property values and rents rise.</p>
research questions and	<ul style="list-style-type: none"> -How this flexible housing model of Polykatoikia can be re-transformed again in the future? - How can the relationship between the Polykatoikia building, the urban scale, the neighborhood scale, and the interior scale be redefined? - How can the Polykatoikia building be redefined and transformed by hosting collective common spaces? -How will affordable housing be made in Athens for young people without depriving them of important living spaces? - How will the feeling of the neighborhood be restored?
design assignment in which these result.	<p>I will design a new Polykatoikia, exploring the important interior spaces (Terrace, Balconies, Foyer, Uncovered space, Skylight window, Porch, Piloti), establishing the collective character and collective activity among the tenants, and creating conditions of interdependence and interaction.</p> <p>Through my initial experience and familiarity with it, I can better understand the neighborhood scale, the urban scale, the square, the encounter within the building, and the new design challenges, experimenting with the minimal living space.</p> <p>Through these scales researching the social identity of the street to the informal sociability of the rooftop, I try to reduce the distance between the</p>

	street and the rooftop by including additional intermediate social spaces such as meeting and interaction points of the tenants.
<p>Redefining Polykatoikia could involve creating cooperative ownership models or incentivizing collective investments in building upkeep and modernization. Redesigning these buildings to include shared spaces such as gardens, terraces, or communal rooms could cultivate a sense of community, enhance social cohesion, and improve the overall quality of life for residents. Rethinking the building layouts can promote social interaction and connectivity. Incorporating features like shared lobbies, multi-purpose spaces, and visual openness can help mitigate feelings of isolation. Redefining Polykatoikia could include policies and design strategies that protect affordable housing, such as mixed-income developments and rent control measures, ensuring that revitalization efforts benefit all residents, not just the affluent.</p> <p>The ultimate goal is to develop a new dwelling type having the spatial and social key aspects of the archetypical space of Polykatoikia, as principle points for an innovative synthesis.</p>	
Process	
Method description	
<p>To effectively address the housing problems in Athenian Polykatoikia, a comprehensive research and design methodology is essential. This approach combines literature research, extensive archival work, typological and morphological analysis, and innovative design strategies.</p> <p><u>Literature Research on Athenian Polykatoikia, Urban Life, and Collective Housing</u></p> <p>1. <u>Literature Review:</u></p> <p>Historical Context: Study the evolution of Polykatoikia in Athens, focusing on its origins, development phases, and its role in urban expansion.</p> <p>Urban Life: Investigate the dynamics of urban living in Athens, particularly how Polykatoikia impacts social interactions, community formation, and individual lifestyles.</p> <p><u>Collecting a Comprehensive Archive of Polykatoikia References</u></p> <p><u>Archival Compilation:</u></p> <p>Conduct research to document existing Polykatoikia buildings, capturing architectural details, usage patterns, and current conditions.</p> <p>Create a visual archive with detailed photographs of different Polykatoikia typologies, focusing on elements such as terraces, balconies, foyers, and courtyards.</p> <p>Gather historical blueprints, planning documents, and municipal records to trace the development of various Polykatoikia structures.</p> <p><u>Polykatoikia Analysis (Typology/Morphology/Form)</u></p> <p>1. <u>Typological Analysis:</u></p>	

Categorize Polykatoikia buildings based on their architectural features, sizes, and layouts.

Analyze the internal and external spatial organization, focusing on how different spaces (terraces, balconies, foyers, courtyards) are utilized.

Examine the form and structure of Polykatoikia buildings, identifying common patterns and unique variations.

Collective Housing Models: Explore global examples of collective housing, examining how other cities have addressed similar challenges through innovative design and policy interventions.

2. Element-Specific Analysis:

Assess how these spaces contribute to individual and communal activities and their potential for fostering social interactions.

Study the design and functionality of entrance areas and their role in creating a welcoming and cohesive community space.

Explore the use of natural light and open spaces in enhancing the living environment and promoting interaction.

Investigate the role of these elements in defining semi-public and public spaces within and around Polykatoikia buildings.

Program Development for Individual and Collective Spaces

1. Individual Residences:

Small Residences: Design individual living units that maximize comfort, privacy, and efficiency while allowing for personal customization.

2. Collective Spaces:

Ground Floor

Rooftop Spaces

Shared Facilities

3. Architectural Tools and Innovations:

Staircase Design: Utilize staircases as transitional spaces that integrate small collective areas, encouraging social interactions and fostering a sense of community.

Injects of Collective Spaces

Literature and general practical references

Selected Bibliography on the following topics:

Polykatoikia

Aesopos, Yannis, and Yorgos Simeoforidis. *Landscapes of modernisation Greek architecture 1960s and 1990s*. Athens, Greece: Metapolis Press, 1999.

Christ, Emanuel, and Christoph Gantenbein. *Typology: Paris, Delhi, São Paulo, Athens*. Zürich: Park Books, 2020.

Frampton, Kenneth, Andreas Kourkoulas, Thodoros Androulakis, and Maria Pagkalou. *Μοντέρνα Αρχιτεκτονική: Ιστορία και κριτική*. Athens, Greece: Themelio, 1999.

Marmaras B., Emmanuel. *Η αστική πολυκατοικία της μεσοπολεμικής Αθήνας (The urban Polykatoikia of interwar Athens)*. Athens, Greece: ETBA Πολιτιστικό Τεχνολογικό Ίδρυμα, 1991.

Schmitz-Hubsch, Kilian. *Athens' polykatoikias 1930-1975*. S.I.: Druckverlag Kettler, 2024.

Theocharopoulou, and Frampton. *Builders, housewives, and the construction of modern Athens*. S.I.: Onassis Foundation, 2022.

Woditsch, Richard. *The Public Private House: Modern athens and its Polykatoikia*. Zurich: Park Books, 2018.

Urbanism

Jacobs, Jane. *The death and life of great american cities*. New York: Random House, 1961.

Koolhaas, Rem. *Delirious New York: A retroactive manifesto for Manhattan*. New York: Oxford University Press, 1978.

Lynch, Kelvin. *The image of the city Kelvin Lynch*. Cambridge: Technol. Pr. & Harvard Univ. Pr, 1960.

Venturi, Robert, Denise Scott BROWN, and Steven Izenour. *Learning from Las Vegas; by Robert Venturi, Denise Scott Brown and Steven Izenour*. Cambridge, MA: M.I.T. Press, 1972.

Venturi, Robert, and Vincent SCULLY. *Complexity and contradiction in architecture*. NewYork: The Museum of Modern Art, 1977.

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

1. My graduation project focuses on designing a new Polykatoikia, exploring key interior spaces to foster communal living and tenant interaction. This directly aligns with the principles and themes of the Architecture and Urbanism (A,U) track in my MSc AUBS (Architecture, Urbanism, and Building Sciences) master's program.

During my studies in the Netherlands, I had the opportunity to test myself with different data from those of Greek cities, which have a very specific profile. In the project I am studying, I analyze exactly the rigid architecture of the Greek city-center, which with all its urban and architectural qualities can be exemplified in points from European and by extension Dutch standards. Proposing collective spaces in a par excellence individualistic all-inclusive housing model, I strongly resist the reproduction of the ownership regime. It is also a personal challenge to propose contradictory elements in the Greek city.

The project addresses urban and architectural design challenges by integrating social and spatial dynamics, which is a core objective of the A,U track. By emphasizing communal living, shared spaces, and the social identity of urban areas, the project reflects the broader goals of creating innovative, sustainable, and socially cohesive urban environments that are central to the master's program.

2. The project addresses pressing social issues by promoting communal living and social interaction within urban environments. It seeks to combat urban isolation and foster a sense of community through thoughtfully designed shared spaces, enhancing the overall quality of life for residents.

Professionally, the project contributes to the field of architecture and urban planning by researching innovative design solutions for the Athenian Polykatoikia. It investigates sustainable and adaptable housing models that can be applied in the Greek urban environment, providing more affordable minimum-living apartments without lacking important facilities. The project enriches the body of research in architectural and urban studies. It combines elements of modernism, traditional architecture, and contemporary urban planning, offering a complete analysis of Polykatoikia. This paper contributes to the academic discourse on sustainable urban development by building on existing qualities by studying the prototype model of Polykatoikia and presenting new frameworks and methodologies that can inform future research and practice.