



**Politecnico
di Torino**

Honors Thesis

Master of Science in Sustainable Architecture

Title

Urban Interstices

An Urban Infill Project in Tokyo

Tutor/Correlator

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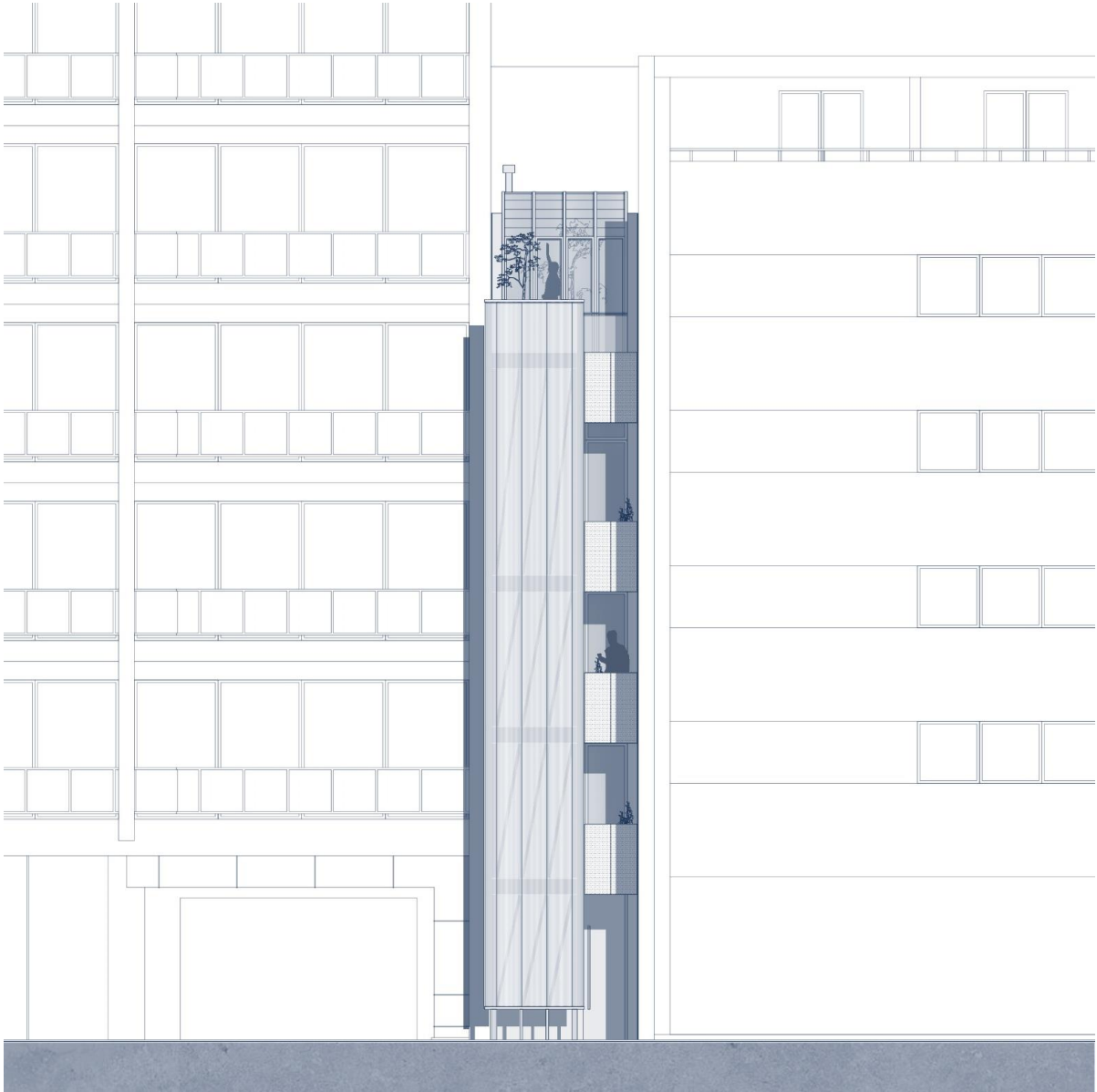
July 2023

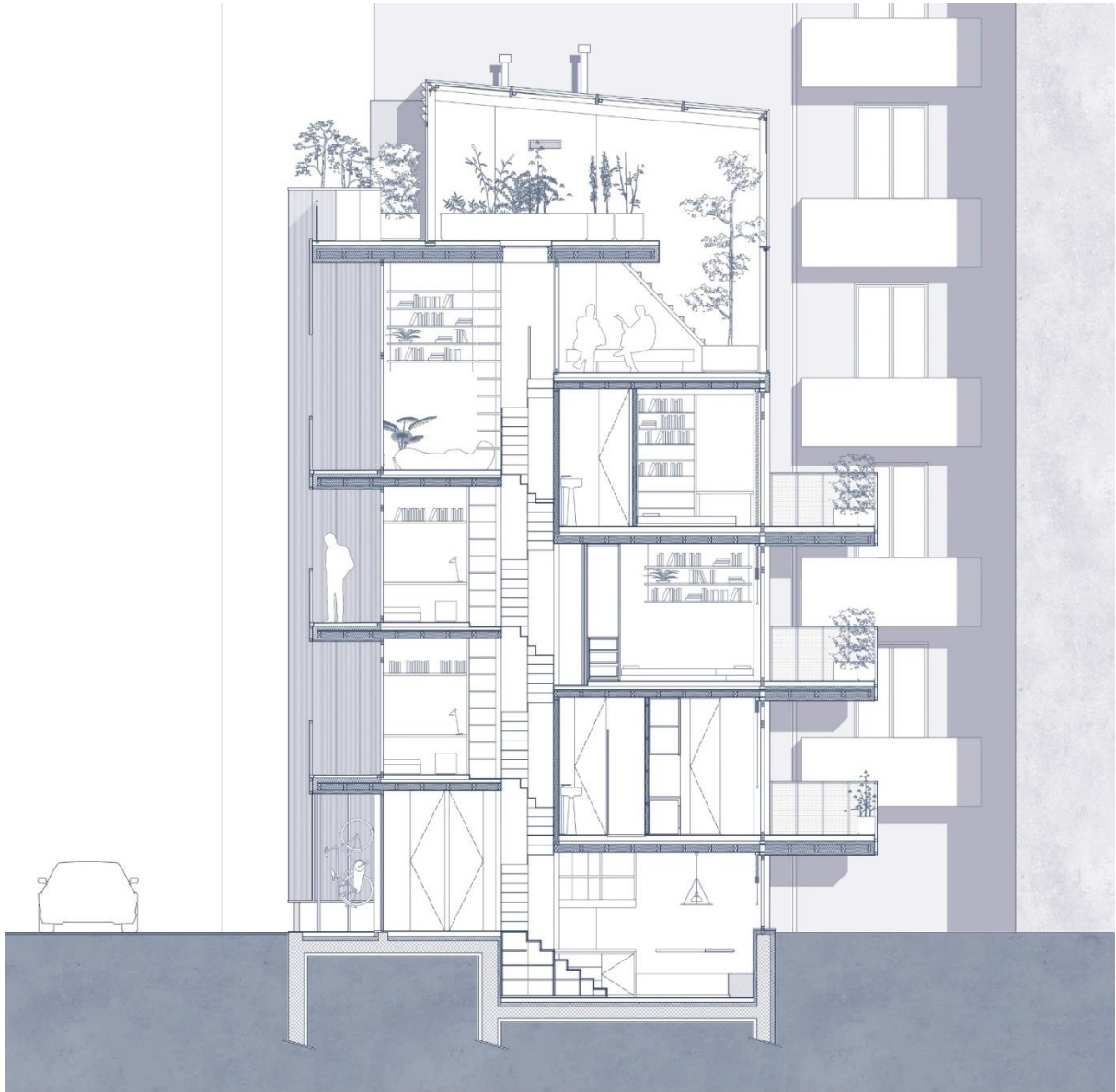
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Abstract

The demographic transition is undoubtedly one of the main forces that drive and define the morphology of a city. The increase in population can be both a determining factor and a result of the evolution of this "urban form" over time. It is now a well-established reality that the majority of the world's population lives in cities. In 2008, for the first time in world history, the urban population surpassed the rural population, with projections indicating that by 2050, urban dwellers will account for over two-thirds of the global population. Therefore, it is crucial to manage and plan for the upcoming urbanization boom, setting goals for sustainable development and reducing pressure on ecosystems, ensuring that this inevitable growth does not result in further land consumption. The objective of this work is to identify urban densification, through infill strategies, as a tool to address new settlement needs by intervening in the remaining vacant spaces within the existing city. These spaces are often unrecognizable, characterized primarily by their lack of substance, represented as white areas on maps. However, the "void" can and should be understood as a space with the capacity to accommodate new relationships and can be seen as a material element for constructing new forms of urban life. There are various types of vacant spaces within the city, each requiring different design responses. These include abandoned areas, functionless spaces, vacant buildings, residual spaces within compact urban fabrics, and interstitial spaces. After an initial analysis of the aforementioned topics through literature review and case studies, the thesis aims to implement an urban infill operation by designing a dwelling within a 2.8 x 9 meter interstitial space located in the heart of Tokyo's urban fabric. Given the size of the project site, the design of the building will almost inevitably have to follow the principles of minimalist living. The interior spaces will have small dimensions and essential services, while maintaining the principles proper to living, ensuring proper livability and allowing life to unfold within. Great care will be taken in the choice of materials, construction technologies, and comfort control strategies, with the goal of creating a building based on the principles of sustainability, minimizing the use of mechanical systems and resource consumption and maximizing the use of passive strategies to control indoor comfort.







For info:
(inserire indirizzo mail, facoltativo)