

# **Dynamic Spaces**

**An Exploration of Strategies for the  
Uncertainty in Architecture**

P4 | Reflection

**Michael Funke**

Graduation Studio: A Matter of Scale  
Chair of Methods of Analysis and Imagination

The district of Lasnamäe in Tallinn was originally planned as a Soviet-modernist housing area, which construction was stopped after Estonia's independence in 1991. To this day, the district – composed of typical Soviet panel houses – is characterised by its stylistic and functional monotony, resulting in a rigid built environment that lacks facilities for entertainment, public functions and especially the capacity of adapting to the needs of today's society. Only the recent integration of vast parks creates vibrant and social exterior spaces.

My design aims not only at the integration of new and missing functions in Lasnamäe but is especially centred around the question of how a building can be designed for needs and functions that cannot be predicted today. It is a design that is, in contrast to the Soviet approach, not only suitable for the society of a specific time but can adapt according to changing needs in society and is therefore a sustainable and durable agent in Lasnamäe's built environment.

The site of the design was mainly chosen based on findings from a morphological and functional analysis of the district. It had to be on the east of Lasnamäe since it is the part with the lowest density of public functions and is the furthest apart from the cultural centres of Tallinn. Furthermore, it is next to a site in a park that is used to host public and citizen-driven events, to strengthen this point.

The design process itself is supported by literature research and reference studies. The outcome is a two-layered, generic wooden box which dimensions and shape are barely influenced by any specific functions but is left to be filled independently from the building's structure. These spaces are supported by more specified building parts, containing all necessities. The most important design rule for this is the contrast between determinacy and indeterminacy.

I made up a new name for the type of space I tried to produce. Others might use the word flexible or adaptable, but it seems that many have different understandings of these terms and they often get mixed up in literature. For me, functions and spaces in my building had to be dynamic, so the term I used during my whole process was *dynamic space*. I define a space as dynamic if it has the capacity of appropriation and is capable to respond to yet unpredictable changes in society and its needs instead of hindering the translation of these changes in the already built environment.

I started my research and design process by looking for existing strategies that could help designing a dynamic space. Additionally, I was choosing references for each of those categories that are: undefined architecture, mutable architecture, flexible architecture, open rooms, and pre-use.<sup>1</sup> However, after categorising some references I could already tell without analysing them in depth which of these strategies would be beneficial and which would not. So, I left them untouched and went into literature research to find out what theories might be important for my design. I was inspired by Richard Sennett,<sup>2</sup> Michel de Certeau<sup>3</sup> and Jan de Vlyder<sup>4</sup> to start designing a building that leaves things open to be added, finished or used in an undefined way later on, but first I was not able to bring these theories and ideas in a satisfying physical form.

In discussions with my tutors, I found out that a dynamic space has to be as undefined or indetermined as possible. Even structural grids or too low ceilings determine possible ways of using it. I also realised that a building cannot work with only undefined spaces and elements, so I learned that the crucial factor of a successful dynamic space is the contrast

---

<sup>1</sup> de Vlyder, Jan, 'The Berlage Keynotes: Jan De Vlyder/AJDVIV'. Delft, 14 September 2023. <https://www.youtube.com/watch?v=3DRT3OIVd3I&t=4917s>.

<sup>2</sup> Sennett, Richard. *Building and Dwelling: Ethics for the City*. London: Allen Lane, an imprint of Penguin Books, 2018.

<sup>3</sup> de Certeau, Michel, Steven Rendall, and Michel de Certeau. *The Practice of Everyday Life*. Berkeley, Calif.: Univ. of California Press, 1984.

<sup>4</sup> de Vlyder, 2023.

and balance between maximal indetermined spaces, and determined functions and spaces that allow indeterminacy in the rest of the building.

Knowing this, I was ready to find new references that use this strategy in three different ways: Using walls to contain determined spaces like the Centre Pompidou by Richard Rogers and Renzo Piano, using slabs like the Salk Institute by Louis Kahn or using clusters like the Zollverein School of Management by Sanaa. After comparing those, I decided to use the latter strategy of small but freely placed elements to create spaces of different dimensions in between.

The result of the following design process is a wooden box with two levels that have a height of two regular stories each, to have the capacity of adding a secondary ceiling for extra spaces. In the starting phase of using the building, all interventions in this box will be only implemented by furniture or lightweight separation elements like curtains. This gives a great capacity to change spaces and functions rapidly and leaves the space as unfinished as possible. I verified the functionality of this approach by visiting the projects LocHal in Tilburg and OPEN in Delft. Each of these projects contains different functions without harsh boundaries. Even public gatherings, presentations or performances were able to be hosted in an open space or by separating it solely by curtains from the rest.

Three clusters – or cores – are placed in and at the edge of the wooden box to inhabit all necessary infrastructures and determined functions. They form a high contrast to the wooden box in their level of openness and material. I chose big limestone blocks for the primary structure and façades. Limestone is a traditional building material in Tallinn and originates, amongst others, from a quarry in Lasnamäe. I want to bring this material back to its origins and even show traces of the mining processes in the building's surface.

I hope that my design shows that architecture does not always have to be a perfectly and exhaustively designed building, but that it is possible and beneficial to leave things open for unknown future developments and still create a characteristic and sustainable piece of architecture.