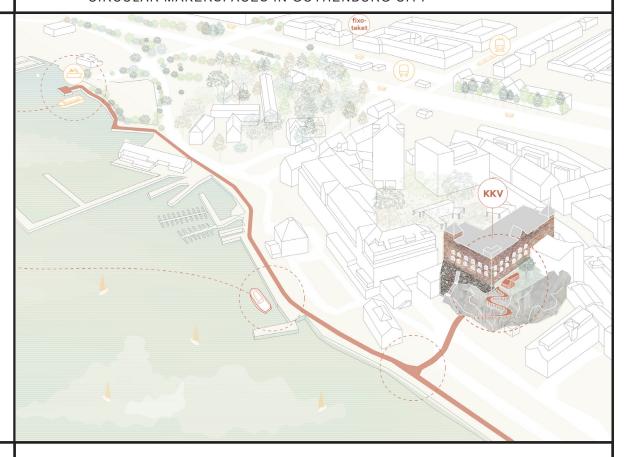
## OCIAL ECOLOGICAL URBANISM

## **EMILINE ELANGOVAN**

## MAKING' THE TRANSITION

UNDERSTANDING AND STRENGTHENING THE URBAN SYSTEM OF CIRCULAR MAKERSPACES IN GOTHENBURG CITY



'Making' the Transition is a master thesis which aims to use architectural and urban analysis tools to understand makerspaces in the context of Gothenburg's urban structure and propose spatial strategies for current and future makerspace organisers to strengthen this system, especially in its contribution to the circular economy.

Current research on the circular economy understandably focuses on larger industrial processes and material flows. However, for a complete transition to occur, closing resource life cycle loops in the supply side of the economy needs to be coupled with shifts in consumption behaviour and the physical infrastructure that supports such behaviour.

Makerspaces are informal, communityrun workshops that support circular consumption and production on multiple levels. Practices of repair, reuse, and redesign can be commonly observed in such spaces although they may not be their main aim.

Informed by existing literature on makerspaces and especially Pop-Machina, an EU research project studying circular

makerspaces, the research focused on analysing the spatial factors that support the spaces and their circular activities in Gothenburg. With a multi-scalar spatial understanding of makerspaces in the city, spatial strategies are proposed at three levels to strengthen the circular processes already occurring infromally. These strategies, which are also guided by relevant government policy and urban development plans, include the use of vacant spaces and adaptations to existing makerspaces. They are catered to makerspace organisers and supporting institutions who wish to set up new spaces or improve current ones.

Through a process of urban spatial analysis, the research provides a systematic method of understanding and improving makerspaces in Gothenburg. More generally, the thesis also contributes to the need to better address the systems level of urban activities which is becoming increasingly important if we are to reach the aim of more sustainable cities.

Keywords: Maker Spaces, Circular Economy, Bottom-up Transition, Urban Spatial Analysis

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