

# **AHRA 2022 Convening: Building Ground for Climate Collectivism, Architecture After the Anthropocene**

## **Urban scale digital twins and commoning practices: Mobility justice and sharing ground resources**

MARIANNA CHARITONIDOU

Faculty of Art Theory and History Athens School of  
Fine Arts

The paper aims to explore how the reflection on urban scale digital twins and the debates about the role of commoning practices in architecture and urban design could be combined in a way that would address climate justice and social justice simultaneously. At the core of the arguments developed in the paper is the idea that sustainable environmental design and regenerative design necessarily involves an exploration of how one can reconceive the redistribution of wealth, land, and power. Useful for understanding how architecture and urban planning can act as actors connecting planning, infrastructure, and land is the 'negotiated planning' approach given that it places particular emphasis on "the actions and agendas of a whole range of stakeholders who together work to configure a fragile system which is constituted through and co-constitutive of each urban context."<sup>1</sup> The paper also intends to examine the role of commoning practices in data-driven society, placing particular emphasis on urban scale digital twins, which are virtual replicas of cities that are used to simulate environments and develop scenarios in response to policy problems.

Among the main objectives of the paper is the exploration of how issues related to social and spatial mobility can be tackled simultaneously through the use of concepts such as "motility", which is employed by urban sociologist Vincent Kaufmann<sup>2</sup>, and "mobility justice", which is used by sociologist Mimmi Sheller<sup>3</sup>. The specificity of the notion of "motility" lies in the intention to understand social and spatial mobility as capital, and the endeavour to address the displacement of both concrete entities (e.g. consumables, machinery or people) and abstract entities (e.g. information, ideas or norms) simultaneously, on the other. Sheller coined recently the term "mobility justice" to respond to the dilemma whether the term migration or mobility is more socially equitable. The main idea behind this term is the intention to render explicit that while mobility is a fundamental right for everyone, it is experienced unequally along lines of gender, class, ethnicity, race, religion, and age. Special attention will be paid to the questioning of how regenerative design is related to a democratic way of sharing ground resources. Regarding its learning objectives, the paper aims to render explicit how regenerative design is related to a democratic way of sharing ground resources. It also intends to shed light on how architecture and urban planning can act as actors connecting planning, infrastructure, and land.

1. Liza Rose Cirolia, Stephen Berrisford, "Negotiated Planning: Diverse Trajectories of Implementation in Nairobi, Addis Ababa, and Harare," *Habitat International* 59 (2017): 71-79; Vanessa Watson, "Co-Production and Collaboration in Planning: The Difference," *Planning Theory & Practice* 15(1) (2014): 62-76.

2. Vincent Kaufmann, *Rethinking the City: Urban Dynamics and Motility* (London; New York: Routledge, 2016).

Mimmi Sheller, *Mobility Justice The Politics of Movement in an Age of Extremes* (London; New York: Verso, 2018).