Track b: **Resilient spaces of river fruition**

Title: Landscape as infrastructure. The Adige Park in Trento

Author: Giulia Boller

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Supervisors: Prof. Arch. Mosè Ricci, Prof. Ing. Michele Larcher
Assistant supervisor: Arch. Stefania Staniscia
University of Trento – Department of Civil, Environmental and Mechanical Engineering
Master Degree in Building Engineering and Architecture

Mail: giulia.boller@yahoo.it

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Main references:

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The thesis project explores the theme of recycling entire urban sections using landscape as a design tool. In particular, the project studies the existing residual open spaces within Trento, an Italian city located in the Alps, and their process in the dynamics of transformation of the contemporary city, paying particular attention on their relationship with the Adige river. Landscape is considered as a new urban infrastructure, able to understand correctly the demands coming from the context and at the same time to establish a network to reconnect the single urban fragments with the river. In this way the design proposal aims to reconsider the lost relationship between the Adige river and the city of Trento, through a Park that meets determinate performances, hydraulic, ecological, productive and in general of spatial quality.

At first the research project identified all the post-industrial areas within the city that define the open spaces heritage, consisting of 33 recycle footprints, so-called because they constitute the footprint on the territory of concluded life cycles. They were considered as the main focus with whom re-establish a resilient connection with the river, through the definition of the Value Map and the Risk Map for the landscape heritage. An important part of the research focused on the study of the flow rates concerning the Adigetto canal with the identification of the most stressed sections, according to the different flood events and the specific time of rain. In this way the research recognized the possible crisis in the rainwater management within the city, identifying the appropriate strategy for risk mitigation. The overlay mapping concerning the landscape heritage in Trento defined the possible open space network that in fact constitutes the new Adige Park, developable through 3 design systems: ecological system, productive system and public space system. Each system was developed on an urban scale, considering the spatial configuration related to the river and at the same time identifying specific devices useful to develop a correct landscape infrastructure for the city. The project paid particular attention on the devices for the mitigation of flood risk, increasing the permeability of the soil and thus reducing the flow rates in the Adigetto canal during rainfalls.

Proposing a design approach on the open spaces available within the city, the project modified the devices in different ways, considering the context of intervention. In particular, the new Adige Park was conceived by acting on the road network, on the riverbanks and on the recycle footprints within the city. In this way it was possible to put into a new life cycle the existing open spaces in Trento, re-considering them in a way of a new Park, which is able to re-connect them with the river both spatially and in terms of meaning. They all find their accumulation point in the Adige River and thus they give a new importance to it within the urban dynamics.