

Doctoral Programme in Civil, Environmental and Mechanical Engineering

Research subjects proposed for the 41st cycle – second call

Additional position with scholarship

Curriculum D - Architecture and Planning, Landscape

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D5 - scholarship on reserved topics

Funded by: University of Trento – [Autostrada del Brennero Spa](#).

Title: Living on highway. Transient collective spaces.

The project aims to investigate the highway infrastructure from the point of view of the architectural design, envisioning it as a site of “transient living” that forms a “linear city” (C. Costa).

The architectural disciplines’ interest in designing infrastructure networks, which has developed during the second part of the twentieth century, pertains to their interaction with the traversed territories and urban and landscape systems, highlighting the potential of nodes as complex urban hubs. This factor has facilitated the reconsideration of the typological-figurative significance of “highway architectures”.

The Autostrada del Brennero serves as an emblematic instance of exploring the concept of “living the infrastructure”.

This is due to its representation of a place whose formal principles are so foundational that it may be regarded as a work seamlessly integrated into the area, both urbanistically and aesthetically, resulting from the efforts of Pietro Porcinai. Additionally, the highway features numerous components (bridges, viaducts, toll booths, rest areas, museum sites) of considerable architectural and engineering significance.

The Proposal aligns with previous research on the subject (M. Ricci, P. Scaglione, *Reinventing A22. Verso infrastrutture osmotiche*, 2011 and A. Gritti, *Autostrada del Brennero. Architetture e paesaggi*, 2023) will examine, from an architectural design perspective, potential solutions for temporary dwelling in parking areas designated for heavy trucks, along with the principles of the green corridor to which the A22 is firmly dedicated.

The research will concentrate on analyzing rest stops for heavy vehicles and truck driver breaks on the Autostrade del Brennero, in relation to European case studies, to ascertain potential design strategies for communal areas that support mandatory rest periods as mandated by legislation (EC Reg. 561/2006, “Safe&Secure Truck Parking” Certification).

Research objectives and expected results

The aim of the research is to transcend the highway as a “non-place” (M. Augè) due to its transitory and transient characteristics, as it is traversed solely by individuals having objectives that ultimately culminate and deteriorate.

Despite this crossing condition, rest areas possess the capacity to foster connections between users and the territory, thereby transforming into “hyperplaces” (C. Costa) that can impart identity, through architectural values, to the landscape – across its different conditions and declinations – in which they are situated.

The outcomes will pertain to the development of strategies and design solutions for settlement units that provide rest areas for truck drivers, incorporating both “domestic” living spaces (such as canteens, lounges, restrooms, and laundry facilities) and communal areas (including small exhibition pavilions, retail spaces for everyday items, and well-equipped outdoor spaces).

The final outcome will be a ‘catalogue’ of diverse flexible layout models for arranging these areas based on principles of environmental sustainability. The examination of the typological and structural attributes of parking facilities will aid in discerning configuration principles that, due to advancements in energy efficiency technologies, may prompt effective alterations and adjustments to the design of highway architecture.

Research outcomes

The research results will be disseminated through participation in conferences and conventions and through the publication of scientific articles edited by the PI and the PhD student.