Bridge and Viaduct in the Landscape: Reasons of the Shape

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Summary

The projects that are presented below are a further piece in the concept and operative puzzle in my study into the "reasons of the shape" of bridges.
This new experience has been gained further to my maturity in designing bridges, viaducts and walkways both professionally (having received some important national and international awards, not the least of which the recent recognition as Consultant Professor at Tangji University in Shanghai) and academically (I have held a number of academic courses into bridge and viaduct design at the Architecture Faculty in Venice University) and is, in my opinion, a very interesting and fascinating formal and composition outcome.

Keywords: bridge, conceptual design, structural design, aesthetics, landscape

1. Introduction

Bridges, which someone rightly defined as the *"transit portals into space"* are an excellent chance to reconsider the cultural codes of architecture and apply them to our territory. There are many ways to perceive a bridge and likewise planning approaches to design it. In all events, the outcomes refer to a "perceived" work. In fact a bridge or a viaduct can be perceived in a number of ways, or rather, by at least two different types of users; generally the first are those who go over it and the second are those who live with its constant presence. However, man's ability to absorb a visual (or environmental) impact and live with it, does not mean that we should offer low-quality panoramic structures which just cause general cultural decay. We are now used to seeing some of our most beautiful countryside broken up and fragmented by unattractive bridges that risk becoming the degraded "gates" to the modern walled cities. Involving the user does not only mean perceiving the form but also the function, or rather, the ability of a structure to "function" within its territory. In fact, if we need to join two sides of a river with a bridge or pass over physical obstacles with a viaduct and we do not consider the population in the area where the construction will rise and what it offers with its passage, we risk creating structures that do not represent the community that lives and moves in the area.
Work on the formal quality and the multifunction purpose of a bridge gives us the chance to escape from a cultural stalemate where, in the last thirty years, Italy has been dominated by a monotonous system of girders placed on set architectural forms. It is of fundamental importance to maintain the technical function as main reference parameter, and paying attention to the economic limits, but also to work on the form and rational size of the structure at cultural, ecological and environmental level. The more we widen our points of view, the more a work of art can give quality and "added value" to its surroundings.

The three projects that I am presenting here, the traffic bridge over the River Taglio as part of the Mestre Bypass, the new traffic network project for Montecchio Maggiore (SS 246 in Recoaro) and the new cable stayed bridge in the city of Pescara, are all part of environmental and functional

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