

NYON FOOTBRIDGES COMPETITION

A TWIN EXPERIENCE

Authors: Yves PAGES¹, Quentin BERTON¹, Klaas DE RYCKE², Niccolo BALDASSINI², Narjis LEMRINI², Ana MARTI BARON³, Xavier VEILHAN⁴

Affiliation: ¹ Explorations architecture (architects), Paris, France

² Bollinger+Grohmann (structural engineers), Paris, France

³ Marti Baron (landscape architects), Paris-Barcelona, France

⁴ Atelier Xavier Veilhan (Artist), Paris, France

Summary

In 2018 the city of Nyon (Switzerland) launched a two-stage design competition for a couple of elevated walkways to improve soft mobility (“mobilité douce”) to and from the city’s train station. The walkways were to be built on steep embankments along railways. The city asked that teams requesting for participation include (in that order) a lead engineer, an artist, an architect and a landscape architect. The requirement for an artist was part of a local policy to enhance public realm projects. The process that ensued pushed the boundaries of interdisciplinary collaboration and explored a renewed approach to user’s experience on a footbridge.

The art intervention is eventually “invisible” though it can be perceived in all the bridge components through modularity, repetition, and an innovative use of colour. The landscaping concept was not to add anything to the existing sites but to reveal their underlying patterns and ecosystems. In retrospect, the team’s approach matched the 19th century concept of Gesamtkunstwerk (“total work of art”) applied to a contemporary piece of infrastructure. Because the budget was relatively low and the construction constraints complex, the team adopted a very pragmatic approach to engineering without preliminary architectural or artistic intent. This quickly meant resorting to a series of 20m spans minimizing both the size and weight of the structure, so that excavation work destabilizing the railway embankments, or the existing forestry was reduced to an absolute minimum. The aim was not to create an iconic crossing with a dramatic structure but to simply raise “another” pathway above the existing topography. As the engineers focused on the structural sizing of a straightforward timber girder solution, a collective feeling emerged that the bridge should look “temporary and frail” in order to instil an increased sense of lightness in the landscape. This counter-intuitive thought became the trademark of the design. The discussion came about the timber scaffolding that Richard Coray built for the Salginatobel bridge to be erected in 1929 by Robert Maillart. The motto became: What if this temporary structure had been kept instead of the iconic concrete structure? What would be today’s experience of this magnificent alpine gorge? The team therefore worked on the idea of a “permanent” scaffolding based on standardization and simple connection details. The scheme evolved from a traditional deck and pier arrangement to a reticular spatial system with structural continuity at the supports.

For each of the sites, the bridge length is close to 300m. Because of the topography and vegetation, the bridges can never be seen in their entirety from a single viewpoint as is often the case for iconic structures (think about London Tower bridge or the Golden Gate in San Francisco). Their perception will only exist in the user’s mind who experiences their full length. Like the designer’s, the user’s experience is informed by cultural references (visual arts, movies, travels) as well as the genius loci surrounding the bridges (lake, rivers, trees). It was at this point that Xavier Veilhan really came to the fore as he began to imagine colour variations as an artistic countertheme supported by the reticular structure. He devised a doppler concept where speed would influence the user’s experience of the structure. Even though the bridges are carefully designed to minimize disruption on a sensitive site, the team never considered blending them in the landscape. As the structural design evolved to a reticular system, Xavier Veilhan linked the form to space exploration technology and singularly the NASA Apollo missions. He devised a colour scheme that initially included shades of blue changing from clear to dark sky blue along the walkway parapets. It evolved to a colour gradient which is extended along the entire length of both bridges.

While the Nyon scheme benefits from an exceptional site and an enlightened client, the “artist inclusive” approach could be repeated in many locations in Europe if public sector clients took a more “off the beaten track” approach to infrastructure design. They should consider more thoroughly the democratic acceptance of such projects in the public realm. Nowadays, many artists work on collaborating with the population, implementing new ways to include and serve the communities. Their “expertise” and vision could be mobilized along architects’ and engineers’ to make more radical and sympathetic bridges.

Keywords: design competition; visual artist; disruption; modularity; minimalism; perception; genius loci.