

## Three Bridges

<i>IRN</i>	398
<i>Location</i>	Ljubljana
<i>Planning</i>	1927-1931
<i>Construction</i>	1842, 1930-1931
<i>Architect</i>	Jože Plečnik (in association with Ciril Tavčar and Janez Valentinčič)
<i>Renovation</i>	1991-1992
<i>Chief conservators</i>	Gojko Zupan, Staša Blažič

The Three Bridges is one of the most important works of architect Plečnik in Ljubljana. They stand in the very centre of the city and symbolically connect the medieval part of the city with younger, more recently developed areas of Ljubljana along Prešernov trg (Prešeren Square). The bridges also connect Plečnik's waterway with the trajectory crossing it from City Hall and Prešernov trg to the Tivoli promenade. The architect skilfully expanded and upgraded the former medieval bridge into a complex work of art.

The old wooden bridge at this location was the oldest medieval bridge in Ljubljana. It was repaired and enlarged several times. In 1842 it was replaced with a stone bridge named after Archduke Charles, as is evident from the inscription on the side of the bridge. It was designed by Giovanni Picco, a Friuli builder from Villach, who used stone blocks from the Podutik quarries. Later the bridge was enhanced with gas lamp candelabras and streetcar rails were laid across it.

By the mid-1920s the bridge, which accommodated a streetcar line, pedestrians, cyclists and motor vehicles, had become too narrow. As early as 1928 Plečnik designed two additional pedestrian bridges placed next to the old bridge in the shape of a fan. The new structures were built at the curve of the river where the distance between the two banks is the shortest. They are slightly wider in the

.....  
Three Bridges



middle and are flanked with staircases leading to a terrace below. Different widths and levels are connected with a grid of fences. The architect designed the bridges with the help of Janez Valentinčič and Ciril Tavčar. He employed solutions similar to those used in Prague and Venice, creating a Mediterranean whole that connects the serene Austrian façades of the buildings of Kresija and Filipov Dvorec, the Baroque front of the Franciscan church and the dynamic curve of the river flowing under the bridges. Plečnik focused on the Ljubljana bridges, on their different forms and adaptations, already during his studies in Italy in 1899.<sup>1</sup>

In his expansion and renovation project, the architect demonstrated his respect for the local architectural heritage, fully preserving the old bridge. He even paid special attention to the old cast-iron railings, which he used in the arrangement of Gerber's staircase. He crowned the bridge with concrete and terrazzo balustrades, spending at least two years working on their design. His earlier plans feature double balusters and spheres as decorative elements on the balustrades, as well as reliefs embellishing the junctions between the bridges. Later he opted for another form that resembles the balusters of the Vzajemna insurance company. The balusters are combined with broad fences and specially designed candelabras and rounded ornaments. By using uniform balustrades, he connected the three bridges into a visually uniform structure that weightlessly spans the river and descends to the lower terrace next to the river, the public toilets and the fish market. With this he transformed the bridges into a component part of the bustle in Plečnik's Markets. An additional, although independent decorative element of the bridges is the former flower shop on the right bank, now converted into a souvenir shop, and a newspaper shop on the left bank.

The fences for the bridges were cast by Curk. The casts were fixed on the already-constructed pedestrian bridges and the middle bridge. Concrete was selected as the main material due to limited funds. The architect took the limitations on the use of stone as a challenge and created a masterpiece in the artificial material he called artificial stone. The individual balusters in the 1930s were made manually, resulting in an uneven consistency of concrete and broken stone fragments. Over the years, the individual layers of some of the elements cracked and stones fell off. Due to acid rain, dirt, fog and great differences in temperature, the originally smooth outer surface of the vase-like bases, fence edges and lamp stands literally dissolved, resulting in a rough, uneven effect. The individual elements therefore had to be replaced less than 40 years later. In 1970, balusters were recast by Curk, but 15 years later conservators were already considering a comprehensive renovation and commissioned the first surveys.

In the early 1990s a new sewage system was planned, which had to be laid over the Ljubljanica river. In 1988 certain changes were introduced to the bridges without the consent of the relevant expert institution. But when the city decided to carry out a comprehensive

---

1 He often wrote about bridges in his letters from Italy. Cf., France Stelè, *ibid.*, pp. 24, 98, 129.



Handmade balusters on Three Bridges

renovation, they sought the advice of the appropriate experts. Since all balustrades were extensively damaged, it had to be decided whether to repair them or to resort to a more radical procedure demanded by traffic and statics experts. It was established that the original balusters could not be repaired – because their surfaces were too corroded – such that they would technically and artistically resemble the forms from the 1930s. They were fixed with weak, insufficiently long metal pins that were rusty and contributed to the internal deterioration of the individual elements. Some of the balusters were fixed to the ground only with mortar. But according to security regulations, the rail was supposed to prevent vehicles from falling into the river.

During preparatory work, a car hit the rail, knocking several balusters into the Ljubljanica; back in 1986 a lorry toppled a part of the rail itself into the river. Due to the delicacy of the project, the chief conservator proposed in 1990 a meeting of an expert committee that would supervise the renovation.<sup>2</sup> Additional material was prepared to this end. Plečnik's original plans were discovered. Detailed studies of different concrete mixtures for the bridges were made. The original moulds for the balusters had been discarded several years previous and could no longer be retrieved.

In autumn 1990, the GIVO construction company first repaired the cracked lower parts of the bridges and laid the necessary water pipes. The first obstacle was encountered during the renovation of the upper layers. Since the wood used for the panelling was not dry

2 The committee consisted of authorities on Plečnik's work (Dr Damjan Prelovšek of the Scientific Research Centre of the Slovene Academy of Sciences and Arts, Dr Peter Krečič of the Architecture Museum of Ljubljana, Marjan Ocvirk of the Faculty of Architecture and France Vardjan as the representative of the Restoration Centre) and the representatives of the regional institute for the protection of cultural heritage Staša Blažič and Gojko Zupan. The committee worked in co-operation with the representatives of the owner (Municipality of Ljubljana, represented by Janez Lesar), The Materials Research Institute and GIVO contractors.

enough, the surfaces of the new concrete edges were not even. The Materials and Construction Research Institute tested various systems to remedy these mistakes. Finally a special polishing machine was purchased to smoothen out the edges.

In the meantime, various companies made sample balusters. The most appropriate of these was presented by Coston. The committee visited the company several times to remedy any minor faults, to find the most appropriate mixture of materials and find the best polishing procedure for the decorative elements on the bridges. The new balusters appear the same as the originals, but they contain new, strong steel pins in their cores. The smooth appearance confused some experts who did not work with the committee. The preserved original balusters from the lower terrace and the area next to the public toilets had to be shown to them to mark the difference between their smooth surface and the rough and corroded balusters from the top of the bridges. The contractors replaced the rails and installed new bases for lamps. Despite the demands of the conservators, the concrete supports were not cast in one piece. Nevertheless, the renovation continued and was completed by the end of 1991. The wooden scaffolding used during the renovation of Plečnik's bridges was used for the construction of the new pedestrian bridge across the Ljubljana in the vicinity of Ribji trg (Fish Market).

#### GOJKO ZUPAN

photos: DAMJAN PRELOVŠEK

#### Literature

.....

Archive of the Institute for the Protection of Cultural Heritage of Slovenia, Ljubljana  
Regional Unit, "Tromostovje" file.

Archive of the Architecture Museum of Ljubljana.

STELĚ, FRANCE. *Arhitekt Jože Plečnik v Italiji 1898-99*, Ljubljana 1967.

ZUPAN, GOJKO. *Tromostovje, študija*, LRZVNKD, Ljubljana 1986 (typescript).

LESKOVAR, IZTOK, FERJAN, MARJAN, ŠAJNA, ALJOŠA. *Plečnikovi betoni na Tromostovju, študija* ZRMK, Ljubljana 1990 (typescript).

KREČIČ, PETER. *Jože Plečnik*, Ljubljana 1992.

HRAUSKY, ANDREJ, KOŽELJ, JANEZ, PRELOVŠEK, DAMJAN. *Plečnikova Ljubljana, Vodnik po arhitekturi*, Ljubljana 1996.

HRAUSKY, ANDREJ, KOŽELJ, JANEZ, PRELOVŠEK, DAMJAN. *Jože Plečnik: Dunaj, Praga, Ljubljana*, Ljubljana 2006.