INTERNATIONAL OPEN PUBLIC COMPETITION
FOR THE CONCEPTUAL DESIGN
OF THE BRIDGE IN THE DOLAC NEIGHBOURHOOD
IN THE CITY OF BANJA LUKA

7-29. NOVEMBER
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The proposed solution of the bridge is particularly well marked because the design represents the space-forming assembly with pronounced spatial and dynamic relationship between construction and spatial elements. By defining the route of movement as basic spatial codes proposal highlights the visual characteristics of the composition while additional elements round off the architectural statement. The new bridge is seen as a distinctive character located in an environment of high environmental, spatial, symbolic and semantic value. Its role is development - the presence of bridge builds on ex-
isting micro universe of the site and it is designed in the process of graduation. The first step are levels of use of the bridge as a spatial structure, with the different types of traffic - communication technology explained by movement, thus experience by building more dynamic, as in a functional, as well as the visual sense, through the consideration of the immediate environment in the process of crossing the river. Furthermore, routing mentioned broken ways of movement is a link to the visual impression of the whole assembly. The transformation of use is placing the visual aspects of building as part of a creative program; dynamic scheme becomes the beginning of the design process and it is seen in the crown structure and form of the bridge. And last, the main structural element becomes a hallmark sign of where the new bridge is - its silhouette rising above the trees, marking the place of crossing the river. In this way, the entire composition was crowned and a new landmark of the town was materialized - the new town vista.

The proposal provides the placement of all, the competition required modes of transport within the area of the basic status of the bridge, as defined by applicable regulatory plan. In addition, it develops an additional walking and cycling strip that extends over the base of the bridge structure. In this way the movement of all modes of transport are secured and stratified. The explanation for the separation of pedestrian and bicycle traffic is in the pursuit of providing as many options as possible for crossing the river in terms of capacity, points of connecting on the river banks and views of the environment. The last mentioned reason is particularly important because walking and cycling bridge is multifaceted and multifunctional facilities: in addition to constituting a sort of oasis of suitable and "healthy" ways to get around the city it takes the role of lookout - competition element required for gathering and retention with the primary goal of looking attractive scenery and panoramic location. The mentioned lookout point is transformed into a linear space which emphasizes, as mentioned, a dynamic dimension of the concept of the bridge; instead of one point retention, it offered the almost limitless number of places from which can be viewed location landscape and visual motifs in distant environment.

Contemporary architectural language communicates the "story" about the future of the river crossing in this place. Light tone of bridge tends to operate easily, and they represent association of the benefits of urban life with its attractive facilities such as the river, its banks, valuable architectural and natural heritage. The basis of the architectural expression is the "transfer" of the direction of the road and pedestrian bridge, which, shifted in the directions of moving, give the basic dynamics to the ensemble. While vehicular bridge conditioned by envisaged provision acts as a basic tone composition, providing pedestrian bridge is a "free subjects" i.e., its
accent. A particular advantage of this proposal is reflected in the fact that the highest arc is the most prominent element structure and backbone of the new vistas of the city, are at the same time visually very "easy" and elegant. This is due to the fact that the arc carries only pedestrian and bicycle path, so its dimensions are far less than it would be in the case if it carried a motor traffic bridge.

The supporting structure of the bridge is made of steel.

Bridge is designed as a system of hiking trails along the optimal preservation of the existing natural environment. Both river banks of the rivers at the site, Vrbas and Crkvena are covered with tiling, which provide unrestricted access to water. By defining new public content proposal provides new spaces for events in the coastal area, and it enriches pedestrian movement and offers reasons for retention, and therefore it represent a new point "release" on the coast.

The realization of the proposal does not initiate the change of planning solutions whose are related to the contact environment, and thus allows faster deployment, as well as the viability of pre-defined relations between public and private interests.

This proposal has the most positive features that make it stand out compared to other submitted proposals which are:

- innovative interpretation of the relationship between different forms of movement where pedestrians and cyclists have priority over motor traffic through the choice of the route by which they want to cross the river.

- innovative interpretation of the belvedere, pedestrian and bicycle bridge, designed linear circuit which offers an unlimited number of points for the observation of the landscape.

- interpretation of the basic elements of the new vistas of the city - the port that carries pedestrian and cycling bridge, which dominates the atmosphere visibility of its height and not to jeopardize it because of its well-balanced geometry and dimensions.
SECOND AWARD

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This proposal is seen as most minimalist annex in environment which it is located. The goal is that the new bridge is visually unobtrusive phenomenon and that represent a new “member” inherited in an environment of high quality. The concept is developed on the activation of spatial, topographic and visual attributes of the current situation which is operationalized as the potential synergy resulting from connection of the river banks.

The content of the river banks, especially the left side of the river at a given location, is raised to the level of the element from which the idea and its materialization are derived; the composition is subordinated to the space under the bridge, so its elements, by their characteristics and more – and their mutual relations, as much as possible, illuminate the space of the ground beneath them, freeing it from its presence, so that it becomes, in the true sense, the space of the shore. The program is consistently fulfilled with the treatment of the new bridge as a character that is neither subordinate nor superior but present. In addition, his peculiarities are not deprived of an attempt to take a step towards a “lyrical” attitude towards the environment and its basic values, which is achieved, again, by ambient means where the main role is played by greenery, light, ground motion and subtle indication of the direction of movement, primarily pedestrians and cyclists. Manifestation of the bridge, using the route of the natural flow as well as forces through the material, gives the image of the elegant, slender structures that match the ranges of greens, constantly changing scene of river flow and topographic running river banks, all in an attempt to become a valuable part of the future picture of the area.

The proposed solution accommodates the entire given program within one set; consistently fulfilled task requirements concentrate on affirming river banks space to the fullest extent possible. A special quality of the proposal is the separation of lanes of opposite directions, and the release of light into the underpass area. In addition, the bridge as far as possible rises and extends above the ground on the left bank of the river. In this way, primarily as mentioned above, the space under the bridge is formed as the content of the site, illuminated to the fullest extent possible and processed to provide opportunities for various outdoor activities. In addition, some high-growth specimens of the site occupy, in part, the distance between the pavement lanes, which provides a rich ambient in visual terms but also reduces noise pollution and exhaust gases. Pedestrian and bicycle traffic are integrated into the basic “body” of the bridge. A slight twist of the upstream part of the bridge forms the required vantage point, which is also indicated by space and shape. The pedestrian and bicycle paths in the part towards Kastel fortress are sepa-
rated from the main part of the circuit and extend towards the future roundabout at the intersection of Tržnička and Đuro Daničić streets.

The new bridge is designed as a structure of minimal silhouette within the environment in which it is located. Its contour connects the green massifs of the river banks and is a visual link artificially subordinated primarily to the river and the profile of the high vegetation massifs. The feeling of lightness of the bridge and its hovering over the ground was achieved by separating pairs of motor traffic lanes in opposite directions as well as raising the bridge above the ground to the maximum extent permitted by the given elevation angles of its construction. Bright colours, transparent fence, illumination and form of the basic body of the bridge and its elements underline the minimalist impression have announced a design and architectural language.

The supporting structure is made of reinforced concrete, prestressed.

A system of walking paths is envisaged with optimal conservation of the natural environment. The solution does not offer new event venues in the coastal area itself, and the movement of pedestrians enriches and offers reasons to stay, and thus a new point of "going out" to the river banks.

This proposal has the following characteristics that set it apart from other proposals:

- innovative treatment of the pavement surface of the bridge - the body of the bridge, on which the traffic lanes of opposite directions are spaced, and therefore the under-bridge space is illuminated, which gives it greater comfort of use.

- the under-bridge space is affirmed to the fullest extent possible.

- minimalistic silhouette of the building, which creates conditions for its good, previously listed features to be combined with vertical accents.
HONORABLE MENTION

The concept of a new bridge communicates the metaphor of motion complexity as a phenomenon illustrated by the image of the relation of speed as the basis of movement and space as a frame of speed. The proposed solution builds a decomposed form, where each element of the structure in addition to the functional has a decorative purpose. The spatial scheme of the bridge follows the Baroque principles of "decomposition" of form where individual segments have a certain independence within the whole; in this way they become special themes of composition that, with a powerful expression, almost impose their pres-
ence in space. The dynamic of the scene was achieved using the physical characteristics of pedestrian and bicycle movement, which were transformed into material bands with a strong visual charge. On the other hand it is, this aforementioned powerful charge, what produces a visual impression that competes with the existing space by reducing some of its qualities. The structure of the new bridge by its appearance exceeds the ambient "capacities" of the site and acts "too strong" and to a certain extent, intrusive in relation to the attributes of the site.

The basic lane of the bridge, which contains motor, bicycle and pedestrian traffic, occupies the dimensions and position stipulated in the regulatory plan. At the level of the aforementioned, basic lane of the bridge, a separate cycling bridge is provided upstream, which winds above the surface of the river stream and serves as a kind of bicycle belvedere. Above the basic configuration is developed a system of footpath-lanes that rise above the ground pedestrians who want to view the surrounding panorama of the city. Between the tapes there is a special vantage point to keep the viewers on and stay on the "heavenly" platform.

The “baroque” decomposition process, as noted, is the backbone of the visual expression of the proposed solution. The supporting arches of the structure also take over the purpose of pedestrian paths, and the combination of structural, functional and formative segments of the composition are at the service of the dynamics of the image - a new scene that greatly changes the character of the existing environment.

The supporting structure of the bridge is made of steel.

It is designed system of hiking trails with maximum preserv-
HONORABLE MENTION

The concept of the new bridge favours pedestrian and bicycle traffic over motor. The arrangement of the aforementioned purposes is hierarchized by the position in space, in fact, by their interrelationship - the mise-en-scène. The character of the form of motion becomes a spatial - form allegory of the city matrix in the small; carriageways, pedestrian paths, bicycle lanes, the square, the pedestrian area, the porch are all elements of an urban structure which, in the case of a new bridge, are unified.

Pedestrians are placed at the very top of the structure where, unhindered by other traffic, they
can enjoy their microcosm. The pedestrian space here represents the paradigm of an essential relation to the concept of human settlement. This, first, points to the value system that the author represents, where man and his comfort are placed at the core of events. In addition, the concept of a new bridge represents a distant, yet hinted implication of the terms green city and “smart city”. The overlap of the "machine space" and the "space of the people" also establishes the "spatial efficiency" of the solution, where both machines and humans are given almost the same surface area for use without compromising each other.

This solution overlaps motor and pedestrian traffic, forming paired spaces for different types of movement. The main body of the bridge contains pavement lanes for motor vehicles and partially, horizontally, separated bicycle lanes. Above the base, a pedestrian platform was developed with a pedestrian centre above the river course. The space thus organized denotes movement and restraint above the centre of the river, becoming belvederes over Vrbas. The mentioned space is green, so the connotation of the square is completed and underlined.

The separation of surfaces for different types of traffic forms a two-lane silhouette with a lattice between the belts. Transparency of the assembly allows the view through the building and the presence of existing greenery at the location. The pedestrian surface that develops above the lane is a contour that provides the necessary heights for passing motor vehicles. The solution does not offer the height accent of the composition, so the whole bridge assembly is hidden in the canopy of the existing ambience, which, in part, cancels the contest to give the term vista.

The supporting structure of the bridge is reinforced concrete. The author envisages the use of wood as well as the alternative use of steel, line elements. The methodology of prefabrication is emphasized.

A system of pedestrian paths is envisaged with maximum conservation of the natural environment.
The proposal envisions a wide pedestrian platform below the traffic lanes. The space in question is, in fact, a linear square connecting the river banks intended for the movement and retention of cyclists and pedestrians. The allegory of user gathering is to emphasize the urban identity of the place. This process also affirmed the notion of a city forum as the focus of life for its inhabitants.

The surface of the river, the river square and the “traffic” bridge over-
lap, creating a place of connection between the banks that serves not only crossing but also residence. Space pairing for different types of movement creates the opportunity to give pedestrian movement, that is preferred here, the optimum conditions for functioning. In addition to the basic purpose of crossing the river, it provides additional possibilities for staying, contacts and tarrying at the most interesting crossing point - in the middle of river Vrbas. However, in this solution, the pedestrian platform is overstated. The minimalist design approach results in a sleek, two-lane assembly that connects the river banks and contrasts with the sprawling high-silhouette of the site. Materialization is unambiguous, which underlines the “austerity” of solutions. The absence of an accentuated, vertical element of the contour of the bridge diminishes the possibility for him to build a new branch of the city. The bridge structure is reinforced concrete. The coastline has been resolved as a platform system, mainly on the left bank of the river, to a somewhat overstated extent.
The new bridge tends to emphasize the elegance of the assembly, which optimally alters the scene of the existing ambience. The elements of the composition are subordinate to one dominant motif - the contour of a large arch, which is visually and constructively multiplied by becoming the leitmotif of the assembly. This triggers the classic metaphor of connecting the shores with a curve that reads the burden of those they carry, as well as the imaginary line of connection of the river banks. All required types of traffic are located on the main body of the bridge. An extension for the
movement of cyclists and pedestrians is also provided on the up-
stream part of the assembly, which also serves as a lookout point,
separated from the traffic lanes by an
arched wall. The downstream part of the
bridge does not contain a pedestrian-bi-
cycle path, which greatly reduces its usable value. The design aspect of the
proposal tends to form an image of an el-
egant and slender structure whose attrib-
utes serve to form an accent in space.
The phenomena of reflexes and reflections in the materialization of a building are used. The soft visual expression of
the main arch is associated with natural elements and the logical flow of forces through the material.
NON-MONETARY AWARDS

This solution also relies on recognizable circuit shapes that associate river crossing and the visual persuasion of the load-bearing geometry of the structural member. The pairing of the structural arcs only underlines the intended concept. The composition is slightly asymmetrical, which contributes to the impression of spontaneity of the whole bridge formation as well as the tendency to dynamize the scene of the building.

The main body of the bridge contains all required traffic patterns in equal lanes on both sides of
the bridge. The vantage point on the upstream side has been expanded and levelled, which adds to the comfort of using the space. It was built as a small amphitheatre with a firewall to protect it from the negative effects of exhaust gases and the noise of motor vehicles. The composition is visually dynamic and elegant. Pair of load-bearing arcs is associated with the accentuation of movement, river crossing and speed of movement. The lookout associates with the bridge event centre, retention and communication of users. The backbone of the structure is a pair of steel arches with supporting cables and a reinforced concrete slab of motor traffic construction. The river banks area is designed as a park area with trails, plateaus and urban mobiles in an area dominated by wildlife.
The concept of a new bridge to the core of the site sets a minimalist silhouette. It is visually connected by high-growth massifs that, on the right bank, obscure a carrier pylon with a vantage point. The aforementioned structural element is placed on the right side of the river bank, so that this vertically expressed element is further away from the protected area of Kastel fortress and the river ambient next to Kastel fortress.

This sought to preserve as much as possible the existing image of the environment in which the new bridge is placed. The spatial solution of the bridge encompasses all types of traffic connected
into a single traffic lane in one level. Steam vertical couples connect the ground and the traffic surface of the bridge. The lookout is not placed on the main surface of the bridge, but on a supporting pylon, which, as far as possible, distances it from the centre of gravity of the site, creating an opportunity for a broad view of the environment. The visual appearance of the bridge is reduced, minimal. The aforementioned load-bearing pylon is the only height element of the composition, but it is "removed" from the centre of gravity of the subject location precisely to minimize the visual presence of the new building in the environment. The bridge structure is reinforced concrete. The pylon, using steel clamps, carries the motor traffic surface of the structure. The proposal of the river bank space as much as possible tends to preserve the existing natural environment.
OTHER PROJECT

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Srdjan Luzajic and Miomir Luzajic, from Serbia.
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Loris Dal Pos, Roberto De Luca, Daniele Bortoluzzi, Alessandro De Luca, associates Luca Muffato and Lorenzo Zorzi, from Italy.
The general concept of the bridge design was to create a pedestrian connection of Dulan and Malanka Streets for pedestrians, motorized vehicles, and non-motorized vehicles. The design allowed for public recreational space under the bridge on the left and the right banks of river vras, which created a visually attractive environment under bridge public space environment.

The structural concept of the bridge design was to connect both sides of the river vras by a non-motorized path that runs perfectly, in which the supporting structure stands from the bottom of both bridge banks on the left and right sides of river vras and meets at the middle of the bridge with an arch connecting the 2 sides of the river vras. The system of support of the bridge starts from a single point under the bridge and stands above the bridge horizontally like a cantilever, helping to minimize occupation of support space and also maximize space for public recreation under the bridge. The path way on the bridge is designed to help physical separation of motorized and non-motorized vehicles with a bridge side-walk (sidewalk) at the center on the middle and a 3.00 m buffer zone on both sides of the bridge. Also, there is an additional space (3 m) for the bridge path way used as a viewpoint from which to view Kibbitz, Lijera, and other adjacent landscape areas.

The landscape design on both sides of river vras was designed to create a clear view to view river vras and also the meeting points of both river vras and river vras for the people, reaching from both sides of the bridge. The landscape design on the left side of the bridge was designed for public gathering and contact with the surrounding river vras, while the right side was designed for view vras and public contact with public space area.
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**OSNOVA MOSTA**

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