

## ST. BENEDICT CHAPEL IN KOLBERMOOR. GERMANY

Kunze Seeholzer. *architektur&stadtplanung* (Peter Kunze, Stefanie Seeholzer)

The chapel stands in an esplanade in the middle of the Old Mill Park in Kolbermoor. The visitor penetrates through a spacious front yard to the entrance with a bell and gradually into the sacred interior. The classic image of a church is reinterpreted with a new and contemporary language.

The materials used for this construction are concrete and wood. The rain water flows through the open wood gutters representing the conjunction with the continuous time-passing- symbol of the race of life.

The central issue here is the lighting. We refused to window openings so the room is deliberately lit with Zenith light. The view is focused directly on the cross and then directed towards the sky. Light enters through the ceiling and this way it appears to be floating. There is a fluid transition between in and out, heaven and earth. The changing light that penetrates from the ceiling is the only true ornament. The chapel is dominated by its contrasts: light and shade, closeness and distance, massiveness and lightness, interior and exterior.

## CONCRETE CURTAIN

MEMUX *architectural design* (Thomas Menzel and Muxel Reinhard) + Pils Christine + Werner Schedler

The unusual employment of concrete lends this object, which is nevertheless fit for everyday use, its extraordinary presence. The apparent contrast between materiality and variability has been translated into a piece of textile architecture. The colour and form of the concrete cushions are adaptable to the respective function. The concrete curtain may be installed indoors and outdoors. It serves as a sun- and windscreens, privacy screen, façade element, or heat-accumulating room partition. The texture of individual elements attached to a flexible carrier material is reminiscent of a quilt and holds visual surprises on both sides. Here concrete has been given a soft, poetic character, which is increased through the refracted light, its sluggish movement in the wind, and the sounds resulting from it.

## SCHANERLOCH BRIDGE IN DORNBIERN. AUSTRIA

Marte.Marte *Architekten* (Bernhard Marte and Stefan Marte)

The bridge through the Schanerloch gorge is part of the impressive road from the city of Dornbirn to the hamlet of Ebnit which picturesquely situated by the well of the river Dornbirner Ache at the foot of scenic mountains. The spectacular route to this ancient settlement area is characterized by a series of natural rock tunnels and stone bridges.

Originating from the well known typology of the stone arch bridge, modern technology takes the geometry of the arch to its very limits. The reduction of the arch rise to a statically necessary minimum is combined with a twist along one axis. The latter is also responding to the bending road as a curve immediately follows the bridge in both driving directions. The result is a concrete sculpture that might look unspectacular in plan and from the driver's point of view, but from the shore of the river winding through the gorge it unveils its compelling fascination: it playfully mimics the frozen dynamic of the mountain road and captures the dramatic place in reinforced concrete.

Perfect in form, a masterpiece of design and statical calculation precisely fixed in the spectacular scenery.

## MICASA VOLUME B, VITRA SHOWROOM IN SÃO PAULO. BRAZIL

Marcio Kogan. Co-author: Bruno Gomes and Bruno Guedes

Popular urban Brazilian civil construction, with the consolidation of previously-precarious neighborhoods, executed with disposable material, has specialized in the building of that which was called "puxadinhos" (annexes), small enlargements, be they vertical or horizontal, taking over all the small lots. The formal city has incorporated this culture and has suggested, in the ever-new Latin-American cities, always fresh, always renovated, a program for architecture: building on the already-built.

The Store Micasa Volume B is an annex, a "puxadinho" of a previously-existing store. The building has, nevertheless, acquired a strong symbolic presence. A small tunnel connects the entrance to the Micasa annex with the showroom of the initial store, and is installed perpendicularly in relation to the new space. A patio located at the end of the lot gives access to the store and the design studio. The annex interior ground plan is a large span, conceived to configure an ample and dynamic area to house the VITRA showroom, which Micasa sells. The front façade is a broad showcase of instigating proportion, low and long, which every now and then displays the owner's antique car collection.

The store was built using rustic material and rustic executions. Rustic and modern. Micasa Volume B recalls the artisan processes of popular civil construction, and, above all, the modern Brazilian buildings, brutalist projects in a brutalism reinvented south of the equator, attentive to the local knowledge. The façades of the store were made in a not-very-common manner using exposed reinforced concrete: the outward appearance of the material, generally done very precisely with new lumber, is used here randomly, chaotically, and some wood was not even removed after curing. The brises-soleil in the offices are made of a net of reinforcing bars used for the concrete. This delicate steel lace, placed vertically, function as light filters in the large windows. The external pebbles are made from the crushed rock used to produce concrete.

Gabriel Kogan

## 63.02° IN NOGATA, NAKANO. TOKYO

Jo Nagasaka +Schemata *Architecture Office*

63.02°, built in a densely residential area in Nakano, Tokyo, is a small building of a SOHO and an apartment for rent. The front road is really narrow, but the next apartment has a big open space between the road and the building. In order to this situation, the facade of 63.02° is inclined 63.02 degrees toward the front road, so that a wide and deep view is acquired. From the large windows that are opened on the inclined facade, you can see neighbor's cherry tree and the cityscape.

## EXTENSION OF AN EXISTING DWELLING IN VANDOEUVRES, GENEVA. SWITZERLAND

Charles Pictet

The existing house was built in the early 70s in a traditional style. The project is not conceived as an extension of an existing building. It's an abstract volume. One might wonder if their function is related to the garden (pool or sculpture), to the existing building or to the purely technical aspects. With the lightning system located in the glassed surface, the windows are lit at night creating an atmosphere that resembles an illuminated swimming pool. Reading abstract the expression of the existing house calls into question the language used in it. This project raises the question of the adequacy to the context and challenges the traditional decor that the existing housing proposed.

The project is an extension of an existing house. The owners wanted to create extra space but functionally independent. They required an office directly accessible from the exterior. In this office, designed to be used as medical advice, large windows of translucent glass on the deck create an atmosphere of privacy in the consultation room. The building is buried under seeks to minimize its visual impact on a small garden. The two buildings are linked by an underground passage level.

The outer casing of the project was built in dyed concrete. The gray-green tones are used according to the colour of the glass and walls. Large-format glass conform the glazing attached to a stainless steel joinery that allows the transition to the concrete. These thick glasses are also equipped with filters that reduce the sun's effects.

## SHIN-YATSUSHIRO MONUMENT IN YATSUSHIRO, KUMAMOTO PRE. JAPAN

Kumiko Inui

The Shin-Yatsushiro Monument was opened in 2004 to celebrate the new bullet-train station in front of which it stands. Located in Kumamoto Prefecture in Japan, the project is situated amongst a rural landscape with few distinctive features other than the station itself, whose urban architectural stylings are somewhat incongruous with the open nature of the site. In response, I designed the monument with the intention of mediating the scales of the train station and the site.

Choosing the house-shaped silhouette and working with the shape of the traditional domestic window, I distributed a pattern of square openings to be cast into the 7cm thick, glass-reinforced concrete wall- and roof-planes. Comprised of seven different size squares, the irregular pattern of openings makes various aspects of this monument. If the monument is looked from the long distance, only bigger squares are recognized and they look normal windows. As a result, the monument looks as if one of the house in the typical country landscape. However the volumetric enclosure of the monument become dematerializes as you approach to it.

Although intended as an un-programmed enclosure, the structure has been adopted as a waiting area for train passengers.

## KIOSK IN DORNBIERN. AUSTRIA

Wellmann *Ladinger Architectur*

From certain angles this structure- located near Dornbirn, in Austria's westernmost province- appears to be solid to the core. The kiosk, "cast" in coarse, watertight reinforced concrete, is situated in a dramatic, pristine setting between a lake and a ravine, on a flat site along a mountain stream between the landforms known as Rappenloch and Alploch.

The diminutive structure, only 7.10 x 3.60 m, supplies hikers and climbers with refreshments and a place to rest. The monolithic building massing is clear-cut, an elementary shape recalling the primitive hut. The edges appear sharp; the silhouette contrasts clearly with the woods behind it. From the exterior, no detailing is evident. The entrance and the large, hinged shutter are flush with the concrete. They are both made of rough-sawn silver fir and correspond to the concrete's raw, sand-blasted surface, which bears the imprint of the boards used in the formwork. A strip window on the southwest side, with the silver-fir grill flush with the façade, directs daylight into the kiosk. With the passage of time, the silver-fir façade elements will turn grey, and their colour tone will increasingly resemble that of the concrete. The exterior is characterised by the archaic effect, as well as its roughness, contrasting with the interior's materiality and the warm colour spectrum, particularly the reddish-brown formwork sheets and the black, sealed concrete floor.

In addition to the shop, which is furnished with a counter and bespoke shelving, there are a bathroom and minimal accommodations: in the auxiliary area, beneath the ridge, there is an upper level which can be used for taking breaks, as well as to spend the night- in case the owner doesn't feel inclined to make the trip down the valley, or, in other words, back to civilisation.

## ENVIRONMENTAL MONITORING AND INTERPRETATION'S CENTRE (CMIA) IN TOMAR. PORTUGAL Embaixada – Arquitectura

*Restoration, so called, is the worst manner of Destruction.*

John Ruskin

Since the last decade of the xx century, it has been usual, especially in old Europe, for the commission of projects to demand the conservation, renovation and conversion of constructions from a recent distant past and from the most diverse typologies, and cultural matrices.

This preservation syndrome, sometimes leads to an overvaluation of the building structures. Age is not a warranty of architectural quality, on the contrary it is a natural selection process. The adequacy to new and contemporary programs can be extremely liable to error. If in certain cases the possibility of adequacy is enrolled in the spatial identity of the building, in others the change of uses reveals itself inadequate, leading to an inconsistent meaning in the character of the building. Sometimes the preservation of the architecture we possess, can be, the worst manner of destruction.

The aim was for this projects to energize the rehabilitation of the city. The Project is a reconversion of a former rundown infrastructure that plays a relevant role in the social and urban context of the city of Tomar, although without any particular architectural interest.

The building has been subjected to several attachments and changes over the years, finding itself threatened by some decadence and inadequate for the intended use. Was adapted into a bank institution, an industrial storage and finally adapted into offices belonging to the city hall, with new walls, floors, and technical ceilings. Eventhough the building it's protected under historic-preservation ordinances.

The new program comprises two distinct areas: a public area for exhibitions, meetings and cafeteria and a private area consisting of Lecture rooms and accommodation for invited artists. Confronted with the regulation plans, the design maintains the entire external perimeter construction, while its rundown interior is totally scooped out.

Therefore and due to the functional program, the new construction establishes itself as the anatomy of the existing building. A new architectural body that runs throughout the available space, de-multiplying tectonically the finite interior into a new series of places and programatic situations.

The private areas are volumetrically defined within the structure and optimized for inhabitability. Each with its own access, atmosphere, identity, shape, use and dimension. The Social life, exhibitions and meetings take place in the interstitial space around the new structure, and are characterized and organized by the programmatic events defined by the enclosed spaces.

The existing building acquires a new interior reading, being reconfigured and transformed in a unitarian and hermetic space with the use of white mate paint and mate epoxi resin coating. For the organism that contaminates the interior it was created and developed a kind of skin. Through some kind of alchemy a substance was developed, a recipe, by conjoining some ingredients: Dark pigment, Acrylic resin and reflective glass spheres. The most challenging and seductive in the design process was claiming and believing in the possibility of transforming the spatial structure in a laboratory. Seeking and testing solutions capable of answering to a particular project ideal, wich inevitably diverge from the generalistic processes of standarization. A machine capable of producing space, instaled in a shell that was progressively deflated and then insuflated with a new and strange form of life.

## HOUSE H IN LJUBLJANA. SLOVENIA

bevk perovič arhitekti. Matija Bevk, Vasa J. Perovič, Ana Čeligoj

House H is situated on a prestigious location – in a residential neighbourhood of Rožna dolina, on the border between the city centre and the greenery of Rožnik hill. Renovation and extension was about connecting existing, introverted, autonomous 60's structure with the surrounding garden.

The new garden pavilion is an extra living room which works as a mediator between the house and the garden. Distanced from the house and raised from the ground it works as a space "in between" – floating above ground despite its heavy concrete structure.

The floor plan of the monolithic structure is a literal interpretation of specific requirements by city planners which included distancing new structure 4 meters from the site edges.

The "broken" roof is dictated by the views opening to the outside. The pavilion works as "camera" with the floor to ceiling openings functioning as lenses directing the views to the greenery. The structure of polished white concrete appears as a rock, randomly thrown into the garden.

## KIVIK ART CENTER IN KIVIK. SWEDEN

Snøhetta

Kivik Start is the first phase in the establishment of a new contemporary art centre in Kivik, Sweden. Snøhetta was invited to produce a temporary pavilion that combines art and architecture together with an artist of their choosing. Norwegian photographer Tom Sandberg was chosen for the inherently ambiguous qualities of his black and white photography.

Kivik Start is a series of explorations of the spatial and temporal relationship between photography, architecture, and the landscape. The solid concrete boxes attempt to capture the ghost of the timeless photographic image in the here-and-now of the construction. The site, centered around Lille Stenshuvud in the Scania region of Sweden's south east coast, is

a mix of cleared pastures, wooded glades, rolling hills and steep drop-offs which make for a varied and layered experience. Strategic placement of the 5 concrete interventions on the site invites the visitor to explore four discrete landscape experiences.

The project consists of the following elements:

Two Viewfinders: a 2.5x2.5m cube that is open on two sides. Viewfinders permanently frame a chosen view of the landscape and serve as bookends for the start and finish of the interventions.

The Mothership: is a series of 5 3x5m rectangular concrete elements which functions as a flexible exhibition space. There is a clear glass enclosure at one end, and two sliding glass doors at the other. Roof lights in the form of curricular holes were cored from the pre-cast concrete and covered with circular glass set in silicone. The pattern of holes was generated from a silk-screened Tom Sandberg image providing a dappled natural light. For the opening season a Tom Sandberg photograph of an airplane wing adorns the right wall.

Two Photo-boxes: a 2.5 x 2.5m cube with a Tom Sandberg photograph silk printed on laminated glass on one side and with a black neoprene cover on the back stare at each other across a bend in the road. From the outside the glass acts as a mirror reflecting it's surroundings, only offering a hint of the image on the glass. Once inside the neoprene slit the viewer can experience the image overlaid on the landscape beyond and the fine raster of the silkscreen up close.

## NORDWESTHAUS BAUMSCHLAGER EBERLE IN FUSSACH, LOCHAU. AUSTRIA

Baumschlagler Eberle / Ziviltechniker GmbH

The construction of the port in Fußach is an undertaking that disdains any picturesque posturing. The clear geometrical structures contrast starkly with the natural environment. Since the year 2000 the port building has »hovered« over its surroundings, giving the owner, Maria Rohner, the overall view she needs.

In response to the concrete tube devised for the head of the marina, Baumschlagler Eberle have installed a cube as the new meeting point for the sailing community. Positioned right on the edge of the moorings, the building presents a striking interaction between the supporting concrete elements and the envelope of glazed panels that allow the contours of the building to shine through. The irregular structure of the concrete elements is set off against the regular rectangular shapes of the sheets of glass. The randomness of the glass decoration avoids too sharp a contrast between the core and the envelope, however.

The purpose of these overlays is to allow light and shade to move around the inside. During the day the interior is transformed into a kaleidoscope of the surroundings, while the reflections of the surrounding water lend »movement« to the outsides. At night-time the ceiling lighting, reinforced by the illumination in the support structure, provides an x-ray picture of the internal organisation of the building. The boat box is at the water level. It is followed by a connecting floor with stairs which provide access from the land side to the club room above.

Situated 8.8 metres above ground, this room plays the main role in the new event building. Its users enjoy the light-dependent spectrum consisting of the biomorphic forms of the concrete and the crystalline structures of the glass. The microscopically fine finishing gives the envelope of the building the texture which effects the transition to the construction, but it in no way conforms to the expectations of conventional ornamentation. Compactness and transparency, light and movement – the architecture profits from the features of the port, providing them with a culminating point in the event building.

Gert Walden

## CASA VIEW IN ROSARIO. ARGENTINA

Diego Arraigada + Johnston Marklee

Situated on the outskirts of Rosario, Argentine pampas landscape, View House is designed from the possibilities and limitations of new residential uses in traditional rural areas.

The 2.113 m<sup>2</sup> plot has a privileged corner peripheral position in front of a large eucalyptus forest. The house is conceived as a sensible object in contact with landscape. With its own logic but able to learn and interact with the site specific characteristics.

It is conditioned by two conflicting desires:

1. The need of establish relationships between household indoor and landscape scale.
  2. Obtaining privacy in the visual conditions with regard of future neighboring houses.
- The perception of the surrounding landscape organizes the program as a succession of spaces in a continuous upward spiral. These spaces form a two level compact mass with a small ground footprint. The formal complexity and tectonics of the house is the repetition of four alternating geometric erosions.

The facades are a dynamic succession of continuous surfaces and with no hierarchy, where each plane of the facade is in continuous transformation. The oblique surfaces reveal the next facade.

As a result of the framed views of the landscape and provide the location of future houses, the openings take a rotational arrangement, in a sequence that begins at the gallery of the ground floor access culminating in the window master bedroom overlooking the east and the eucalyptus forest. In the definition of the openings, the reduction of energy demands has also been taken into account. By varying the orientation, height, and depth, each opening provides a different kind of light and view of the landscape, providing a variety of relationships between interior and exterior.

The succession of formal operations and the framing of the openings cause volumetric and visual impressions of the interior that tighten the space in the sense of movement forming a continuous interior surface landscape, views, and lighting effects.

The exterior concrete perimeter walls were built using local techniques conferring a rustic texture. In contrast, the interior of the house is fine and smooth. Reflectivity is the only fact that distinguishes the polished granite floors from walls and ceilings. The black anodized aluminum frames frame the greens and blues of the landscape, contrasting with the interior atmosphere. The most intimate spaces of the upper floors are covered with Lapacho wood, creating a new contrast with walls and ceilings.

The culmination of this tour of the house is the exterior concrete stairway that leads to a panoramic viewpoint on the terrace that rediscovers the surrounding landscape in its entirety.

### [C]SPACE DRL10 PAVILION IN BEDFORD SQUARE, LONDON

Alan Dempsey & Alvin Huang

This pavilion was the winning entry to an international design competition held by the world renowned Architectural Association school to celebrate the tenth anniversary of their Graduate Design course. The structure was designed for use by the general public and was located on Bedford Square in London, near the British Museum where it provided a rare place for the public to sit and gather informally.

It's visually striking presence invites inspection from a distance and more closely reveals the merging of many discrete flat concrete elements into a single continuous curved form with a thick base that is stepped and ramped to accommodate many different uses.

As you move around, the appearance of the pavilion varies from opaque to transparent, producing a stunning threedimensional moiré. The 12m span structure encloses while also providing a route through for passing pedestrians and blurring the distinction between inside and outside, shelter and stage.

### HOUSE IN HIRO, KURE CITY, HIROSHIMA. JAPAN

Suppose Design Office

This spacious house is a home that has two gardens. The site is located in a shopping district alongside the main highway, a harsh place to satisfy the demands of a client desiring a home with bright gardens. There are no outdoor gardens here, so we decided to plan out the kind of place that you could almost call a real garden, by bringing to the indoors materials that evoke - elements of the outdoors - garden-like elements such as light and raw materials. By setting up garden areas, that at first sight make you feel as if you are in a real outdoor garden, we have created a distinction between the indoors and the outdoors, and by putting characteristically "outdoor" things such as plants and bicycles in the rooms, as well as books, artwork, and pianos, we have portrayed a life in which these elements are all mingled. We struggled to achieve this new outdoors-like form by changing the way we looked at things just a little bit, by unconsciously recognizing these "inside and outside" elements. The garden rooms, where the indoors and outdoors mingle, show that rather than being a home that cannot allow the sort of metamorphosis. This home is comfortable with these changes. By participating in putting the finishing touches on the building's interior design, we think that we have created such a home.

### 3.1 PHILLIP LIM SEOUL FLAGSHIP. SOUTH COREA

Leong Leong, Dominic Leong and Chris Leong

The flagship store designed by Leong Leong for 3.1 Phillip Lim is located in Cheongdam-Dong, Seoul's premiere fashion district. In a period of eight months, Leong Leong designed and oversaw the construction of the 550-square-meter store in an existing four-story building.

The Flagship Typology - Sameness vs. Difference

This project is a single store within 3.1 Phillip Lim's global roll-out campaign, which will include many international locations. Aware of the inevitable repetition that is necessary for such a commercial expansion, we thought of the typology of a flagship store as being characterized by the simultaneous need for sameness and difference. Typically, the consistent repetition of brand traits is necessary to reinforce an identity, while novelty can refresh the aura and desire for the brand. In this particular case the client, a relatively new fashion house launched in 2004, emphasized the need to establish a legible consistency in order to unify the different existing stores in New York, Los Angeles, and Tokyo.

As a result, we questioned the inherent contradiction in the flagship typology. Can the need for sameness and difference become a generative friction rather than a trap?

*"The Crop" + "The Stack" + "The Cut" + "The Inkblot" + "The Liner" + "The Fade"...*

We decided that an effective approach would consist of a playbook of organizational maneuvers that could respond to specific constraints (programmatic, site, economic, construction, schedule etc.) encountered in different store locations and contexts. It seemed logical to use the Los Angeles flagship as a kind of base diagram to which we could apply a combination of these plays in order to exploit the constraints in the Seoul site.

The Crop + Stack + Cut: For example, the smaller footprint of the existing structure in Seoul is accommodated by literally cropping the continuous curving wall of the Los Angeles store into a smaller frame, creating four enclaves. We stacked the enclaves to fit within the two levels of retail space. Each enclave accommodates a different use-display, fitting rooms, storage, and stairs to the upper floor retail space. Since the existing space also had extremely low ceiling heights we extended two of the enclaves vertically to cut out double height spaces one

of which became the new staircase to the upper floor. The main entrance to the store is also a type of enclave, cropped and recessed from the façade with a continuous glass storefront. The Inkblot: The existing perimeter walls are lined in mirror, multiplying the "cropped" curving wall into a field of enclaves extending infinitely in the reflection of the mirror. While the Los Angeles store uses mirror to double the enclosed spaces between the curving wall and the existing wall, the Seoul store uses mirror to expand a continuous visual field of space in which the "cropped" enclaves float.

The Liner: We conceived of the façade and interior walls as being lined with evocative textures, a characteristic of Phillip Lim's design sensibility. It was during this part of the design process that we collaborated very closely with Phillip. The material liners create a narrative of atmospheres from one space to another, each offering an unexpected encounter with the clothing. After many explorations we decided the best solution was to capitalize on the need for consistency by deploying a series of moves or techniques that "evolve" the materials established in the brands other stores.

Consequently, the pyramidal acoustic foam of the Los Angeles store evolved into a conical texture that erodes along the interior walls. We worked directly with a manufacturer to develop 5 unique foam panel types that could be organized into different erosion patterns. The wallpaper is the result of an ongoing collaboration with artist Wook Kim. Phillip had a strong desire to reference the local culture which inspired Wook to develop a pattern derived from ancient Korean ceramics.

The herringbone floor pattern used in the Tokyo flagship is transplanted into the Seoul location and slowly transitions through a gradient of grey tones beginning at the entrance. The Fade: The 20-meter façade is also a material liner that wraps the existing building with a supple gradient of convex concrete panels. The eight different 600mm x 600mm panels types progressively flatten as they climb the façade. It seemed appropriate that the supple texture of the façade should fade into the often overcast and depthless grey sky of the city.

Dominic and Chris Leong

### ART WAREHOUSE IN BOEOTIA, GREECE

A31 Architecture and Praxitelis Kondylis (co-autor)

Between olive, oleander and cypress trees, in a 4000 m<sup>2</sup> plot and a few meters away from his dwelling in Dilesi, Boeotia, the ancient Delion, the erection of the new workshop of painter and sculptor Alexandros Liapis was determined. A part of the landscape was incorporated in the open-space sculpture gallery, hosting the artist's creations. The basic criteria of the new structure's synthesis were: the economy of its realization means, its construction honesty and discipline, its plasticity which would converse with the spirit of the Greek landscape. The new structure is a shell comprised of fair-faced reinforced concrete, completed in three separate phases. The dome, a timeless and interregional architectural coronation element spanning from antiquity to Modernism, interacts with the intimate space of the artist's house, the "cell". The new structure is located in the North-South axis, while the orthogonal plan view is divided into 3 zones: Firstly, the cantilever with the balcony in the South, where the entrance is situated, secondly, the artist's workspace and finally the attic in the North which serves as a storage space. A straight staircase connects the two levels, while the cantilevered concrete steps can serve as exhibition stands for the artist's work. The wall openings, which relate to the Sun's trajectory, the interior lighting and the ventilation, stem from transverse horizontal sections in the building shell. The sliced concrete blocks that are removed now function as benches for people and pedestals for sculptures.

Praxitelis Kondylis

### DEVIL'S BRIDGE IN THE VALLEY OF L'HÉRAULT. FRANCE

Rudy Ricciotti

The work of art fits in an exceptional world heritage site by UNESCO under the path of Saint Jacques de Compostela. It is in dialogue with the existing works: the Roman bridge of the XI century; besides it, the highway bridge that marks the end of the nineteenth century; and another concrete bridge of the twentieth. Each of these works is rooted in its geographical context, in resonance with his own time. In continuity with construction's technological evolution, the slender bridge and its thin section illustrates the exceptional mechanic, economic, and environmental aspects of concrete.

The context requires a bridge with no intermediate supports, so it will require saving a 69 m distance at once in order to reduce its visual impact. The gateway is formed by two parallel and isostatic beams. Ductal FM, from the family of reinforced concrete of ultra-high resistance, allows introducing high prestressed. A width of 1.88 m for pedestrians and cyclists is released between the two beams-bone.

The slenderness of the bridge imposes, contrary to classical works, the introduction of tuned mass dampers to limit the effects of vibrational coupling between the wind and the bridge. The entire structure is precast in workshop. The bridge was completed in 15 precast monolithic segments from a single cast. The post-tensioned segments are then transported and assembled with one-tenth of millimeter tolerance. Works in place are shorter, simpler, with minimal impact on the site. A team of six workers have set up the bridge of 144 tons. The colour of the concrete and its organic section (100% of the material used is structural) increase the physical disappearance of the bridge.

The paradox between affirmation, high technology and physical disappearance shows its value and meaning in a landscape of exception.