

Bilbao is now on the international map, thanks to the phenomenal pulling-power of the titanium-clad Guggenheim. A short stroll down river brings visitors to the recently opened Euskalduna Congress and Music Centre, by Federico Soriano and Dolores Palacios. Report on Bilbao's "second major pillar" in the city's ambitious regeneration plan.

Following the runaway success of Frank Gehry's Guggenheim Museum in Bilbao, the Euskalduna Congress and Music Centre is "the second major pillar" of the city's urban regeneration plan, in the words of its general manager, Joan Ortúzar. Opened in February, the 53,000-square-metre facility is designed to host both cultural and business events, from large-scale opera productions and orchestral and chamber music to a wide range of business meetings. Thus, while the Guggenheim has made Bilbao an international destination, the Euskalduna Centre is positioned to reap the economic benefits of this fame, and to set the bases for further economic growth.

In geographic terms, the two buildings also form "twin pillars", with the Euskalduna Centre located 300 metres down river from the Guggenheim. Both have been strategically located to focus and direct the redevelopment of the city's riverfront, once a thriving industrial centre but now largely abandoned. The Euskalduna Centre is located on a prominent site formerly occupied by the Euskalduna shipyards. The waterfront area between the two buildings, known as Abandoibarra, will shortly be redeveloped by Ria 2000, the public consortium that controls the land, to create a mixed-use complex master-planned by César Pelli. The Abandoibarra project was originally conceived in 1993 as a post-industrial corporate and financial centre. The lack of immediate demand for office space forced a remix of uses, while popular pressure forced an increase in park and open spaces from half to nearly two-thirds of the 350,000-square-metre area. As approved last month by the Bilbao City Council, Abandoibarra comprises a riverfront park linking the Guggenheim to the Euskalduna Centre; a 30-storey office tower for the Bizkaia provincial government; a 25,000-square-metre shopping and recreation centre designed by Robert Stern; a luxury hotel, another 20,000 square metres of office space and 800 housing units, and two university facilities. The site adjoins the Bilbao Museum of Fine Arts, currently undergoing expansion.

In turn, Abandoibarra is a template for the redevelopment of the entire six-kilometre riverfront stretching to the sea during the next 15 years, according to a preliminary plan which could transform the Nervión River into the new vertebra of the metropolis, its "Fifth Avenue" in the words of Santiago Calatrava.

Design challenges – opera in a shipyard

In keeping with the contagious spirit of optimism and high-stakes risk-taking marked by the Guggenheim venture, the design for the Euskalduna Centre was awarded through an open competition in 1992 to a young Madrid couple, Federico Soriano and Dolores Palacios, with little experience in built projects. Both in their late thirties, Soriano and Palacios are active critics and theorists who edit *Fisuras*, their own small press journal, and contribute to other publications. Noted risk-takers themselves, the couple used the competition and subsequent building project as a laboratory for conceptual experiment, achieving interesting results. In formal terms, their design goes against the minimalist current of contemporary Spanish architecture, opting instead for a more complex formal development, with affinities to the work of Enric Miralles or their contemporaries

Alejandro Zaera and Farshid Moussavi, authors of the competition-winning Yokohama Cruise Ship Terminal of 1995.

In conceptual terms, they seek to apply non-architectural "readings" to design problems, "to see if new meanings emerge", says Soriano. In the Euskalduna project, these "readings" extend from a story-like metaphor which animates the basic design concept — the idea of the auditorium as an unfinished, rusty hull from the former shipyard, surrounded on three sides by the dependent foyers and services like construction scaffolding. The auditorium shell was constructed by a local shipyard using naval structural techniques. The "hull", finished in oxidised corten steel and rising 52 metres above the river, contains a main auditorium seating 2,200, with a chamber music hall seating 600, and two smaller meeting rooms on a lower level. Its angled walls offer an effective image for the special isolated realm of the opera hall: two metres thick for acoustic isolation, they are separated from the surrounding foyers by a vertical void crossed by gangways to the different seating levels.

Turning the story into reality

The hull rests on a concrete mat foundation supported by piles, recounts Enrique Sanus, construction manager for the three contractors involved. Its walls are cradled by a secondary structure rising from this mat much like a ship raised in dry dock. The hull's structure of ribs and horizontal beams was designed using naval engineering principles. Soriano explains: "In a boat, the vertical ribs resist the pressure of the water, so they function much like beams, while the horizontal beams function more like columns. Similarly, our columns had to resist significant bending loads. And the structural problem for our beams was not so much the weight of the slabs as it was the long spans and bending forces. Also like a boat, our hull has no expansion joints. Dilations and contractions are figured as another structural load."

The four-level 8,000-square-metre foyer area, including a 2,000-square-metre exhibition hall on the lower level, is broken into staggered floor trays, arranged on half levels so as to reveal diagonal views through the space.

Restaurants, bars, meeting rooms, and offices are located on upper levels around the perimeter of the foyer, with roof terraces looking towards the Guggenheim to the south. The floor trays are connected by multiple runs of stairs, finished in a striking blue artificial stone, and by a scattered line of red elevator shafts. A curtain wall of coloured glass along the handicapped access ramp opens the foyer to ample river views. The terrazzo flooring, the largest and most visible surface in the foyers, decorated with large figures of fantastic animals, outlined in pieces of brilliant blue glass. The figures are intended to suggest a magic garden, extending from sea creatures on the lower levels to creatures of the woods, mountains and sky on succeeding levels. Many are based on prehistoric cave paintings from the region or local legend.

The main auditorium is finished in beech wood panels and oak floors. The orchestra seating is broken up into different levels to disperse sound and create intimacy. The hall was designed for the long reverberation times required for opera, says acoustic engineer Higinio Arau. An acoustic shell closes the stage for symphonic music, reducing the air volume of the hall and thus appropriately modifying its reverberation time. For

meetings, the electronic amplification is designed to make the necessary acoustical adjustments. Thus, the hall can convert to three different acoustical environments.

The 2,000-square-metre stage area is served by an eight-storey dressing room tower. Other backstage facilities include rehearsal rooms for a full orchestra, choir, ballet and opera, as well as soloists. The cross-shaped stage, with sections that descend on hydraulic lifts to a service level, allows three full sets to be quickly interchanged.

Staying afloat financially

The government of Bizkaia provided 80 per cent of the US\$86 million cost of the centre. According to general manager Ortúzar, it operates the centre with a very small staff and minimal budget. The "ambitious" facility nevertheless requires government subsidy for several years. When Ortúzar joined the project three years ago, he modified the programme to place more emphasis on business events – a more secure source of revenue. The number of meeting rooms was increased to 10 and the exhibition hall was expanded. Site work, including connections to the future Abandoibarra development, is still under way.

Merit in metaphor

Soriano and Palacios emphasise that they are not interested simply in the metaphor of the abandoned boat in the former shipyard, or in the nuts and bolts of naval engineering. Rather, they are interested in the formal object that results from these strategies. Critics have accused them of being opportunistic in their metaphoric storytelling, appealing to popular sentiments of loss and identity, for example, in their shipyard yarn, which was included in their competition statement. Soriano contends that this metaphor has little to do with the actual experience of the building, but perhaps he underestimates the power of mental images to influence our reading of the physical world.

Soriano says he feels no allegiance to either a facile populism or to the more traditional professional isolation of architectural discourse. He points instead to the example of filmmakers such as Alfred Hitchcock or Orson Wells, who were able to combine the popular appeal of their works with daring experimental techniques. Such an ambiguous position, he points out, is potentially much more radical in its formal results and impact than a conventionally avant-garde posture – an assertion that the Euskalduna Centre amply confirms.