

ore than a decade after its completion - and two decades since its conception - the Simone de Beauvoir footbridge which leads across the River Seine to the Bibliothèque François Mitterand in Paris is suffering mixed fortunes. While the glass-clad lifts at each end are currently out of service, the wooden seats on the lower deck of the central span have recently been replaced - a pleasant surprise for architect Dietmar Feichtinger, who is giving me a whistlestop tour of the first bridge he ever built.

The lift maintenance has been an ongoing issue, he reveals; they provide access for those who cannot negotiate the gradients of the structure, but the doors were prone to getting jammed. This would not have been a problem had those trapped inside called the lift maintenance team rather than the fire brigade, whose standard response was to break open the doors to free the occupants.

On a cold January day when the wind cuts sharply through the lens between the two levels of the bridge at mid-span, it takes some effort to imagine pedestrians lingering on the lower deck seats. But it's clear that the bridge is popular and with the continued redevelopment of former industrial land in the Tolbiac quarter around the Bibliothèque François Mitterand, is a vital link between the two sides of the river, as well as a destination during better weather.

Even though 20 years have elapsed since the Austrian-born designer came up with this unique structural concept for a footbridge, its form has remained largely uncopied. For one thing, the 'double arch' form of the bridge with its upper and lower access points was driven by the specific conditions at the site - the desire to create direct connections to the crossing for pedestrians, both from the upper level route in Bercy Park and the lower level on the quayside path of the river on the east bank. Similarly on the west bank, walkers can choose to land down at road and river level, or skate right over the highway and arrive directly at the too of the steps and the oublic realm around the library.

And it's not just about the extremities of the structure - I choose the lower level at the central span, so I can examine the new seating and see what the covered area of deck is like, but Feichtinger is keen to point out that from the upper level, we can enjoy great views upstream towards the heart of the city and some famous landmarks. While these views remain - just about - other parts of the changing landscape have impacted the axes and views that Feichtinger envisioned for his first, and still one of his most high-profile, bridge projects.

When the bridge first opened, pedestrians using it to cross the Seine towards Dominique Perrault's new national library building would see a small church spire in the distance, way



beyond the towers of the library but on the axis of the river crossing. Although the spire was tiny in relation to the huge book-shaped blocks, it stood out on a relatively undeveloped skyline. But the inevitable development of the area has included the construction of a large cinema which, while it does not totally block the view of the church spire, it disturbs the setting so much that the special relationship between the church and the bridge axis is lost.

But such minor irritants do not seem to phase Feichtinger; hardly surprising considering his first foray into bridge design was not only a complex and unusual structure, but he was considered the rank outsider in the competition. Now after nearly 30 years living and working in Paris, and having built up an impressive portfolio of projects, mostly in France, he even gets invited to participate in competitions - although only occasionally, he smilles.

Feichtinger recalls that his architectural education in Austria was quite different to how architects are educated in France. He studied architecture at the technical university in Graz, and it seems this background gave him a different outlook compared to the classical architectural education. "It was taught in a technical university which gave it some sense, being together with the engineers." The first part of the course involved studying for a diploma in engineering, and five years later, students eventually qualified as architects. "We get to be civil engineers with the right to carry the title of architect," he says.

In some ways this process was useful in sorting the wheat from the chaff - not everyone made it through the first two years, he recalls, when engineering was quite a major part

of the study. "For a lot of architects the engineering part was something of a selection phase. Also those who came from a general education rather than those who had technical education in high school found it quite difficult."

He is not really sure what led him to choose architecture as a career; he was considering a number of very different subjects and although his grandfather had been a builder and had da aspirations for his son to become an engineer, Feichtinger's father had not been interested and had in fact become a photographer. "Somehow maybe I took over the dream of his father."

Ironically he recalls visiting Paris as a teenager and seeing the Pompidou Centre in the throes of being constructed – a sight that he was 'quite amazed' by. "It was maybe a key moment somehow, I was so young and remember seeing this really strange, machine-like building, it was such a different approach, somehow avant-garde, in this city I didn't know at the time, that I had just discovered."

But even after taking the decision to study architecture, a year into the course he was still not entirely sure it was the right thing for him. He even considered medicine, but hesitated because of the closeness to people that was involved – architecture to him seemed to be a bit more abstract and introverted, which he found more attractive. "Ultimately I discovered that wasn't at all the case," he smiles. He learned that architects have the ability to intervene on a very different level by creating places that can influence people's health in a positive way, compared to medics - the mechanics who come along to fix things when they go wrong.

After graduating, he worked in his home city of Graz – Austria's second city – but found that his attention was drawn more towards the architectural scenes of other European cities than towards Austria's capital, Vienna, which he describes as 'rather closed in'. Having visited Paris when he was a student, he was aware of the big presidential projects that were under construction, and the dynamic that they brought to the city. Graz also had an active architectural scene at the time, with the 'School of Graz' being led by architects Günther Domenig, who was one of Feichtinger's teachers, and Domenig's partner Eiffried Huth, whom Feichtinger spent some time working for. They won their commissions by competitions, he recalls, and they were usually open competitions. At the time there was an effort by the regional government - in fact an initiative by an individual - to open them up to younger architects, to offices without any references.

These days it's so much harder to participate in competitions, he acknowledges, when you need so many references and have to meet so many conditions in order to qualify. At that time he believes that the local politician who was trying to open up competitions in the region was inspired by events in Paris, where Mitterand's presidential projects showed that architecture was a social and a political issue. In turn, this piqued Feichtinger's interest in France, particularly in the way that French mayors often want to build once-in-a-lifetime projects for their towns or regions.

Before moving to France, Feichtinger relocated to Switzerland with the intention of learning French – but found himself working in a German-speaking office in Lausanne. The language was not his only motivation – he was also keen to leave Austria by this point, and he and his wife had two young children. "We wanted to do something, and were looking for somewhere to go – Graz is a small city and we had been there for a long time, we wanted to go and see elsewhere. I wanted to go to the United States but my wife did not want to, it was too far."

His first job in Paris was at architectural practice Chaix & Morel et Associes – ironically at the time they were competing in the competition for the Bibliothèque François Mitterand and although they were shortlisted, they did not win. Feichtinger worked there for some time, involved in other projects, and he was keen to start his own office, but he thought he would have to go back to Austria to do so, he didn't think it would be possible in Paris. "I was working long hours, I didn't know how to get commissions, I didn't even have any time to get organised," he recalls. He started trying to do competitions at the same time – and even won one in Austria, but in the end it was the third prize project that was built. "That was another reason that made me want to stay," he says. But he continued to enter competitions in Austria, which was useful in that it enabled him to build up some proper





references. Although they did not get built, they were proper, priced projects and some attracted mentions from the jury.

These competition participations – some of them also for bridges – were what eventually enabled him to get a foothold in Paris, and to take part in the competition for the Simone de Beauvoir footbridge. He learned afterwards that the client was looking for a young agency, which stood in his favour. By now he had also made contacts at structural engineer RFR through working with them via Chaix & Morel on the Solférino footbridge competition. Consequently he asked if they would like to team with him to enter the competition. "They hesitated slightly," he recalls, "as they were already in the competition with Wilkinson Eyre." In the end they agreed to form two teams, which gave him some credibility in the competition, as they had a strong reputation.

His first two bridge designs were for competitions in Austria - one over the Drau River, which was submitted to an open competition and attracted a mention, and the other was in Graz, which won second prize in the competition.

At the same time as Feichtinger was participating in the competition for the Simone de Beauvoir footbridge, he was also involved in a competition for an exhibition hall in Austria. Ironically he won both the competitions – luckily for him, he says, because for various reasons, the bridge in Paris took eight years to come to fruition.

By this time he was working on many more projects in Austria than anywhere else, but he and his family were firmly settled in the city and did not want to leave, despite finding it very hard to get work in France. At the time, he recalls, the architectural profession was a very small, closed system, wery much built on references. "There were very few open competitions," he says. Things changed somewhat for him after the Simone de Beauvoir footbridge was built, although the system has not really changed at all, he says. "I got to be known a bit more, maybe because of the bridge, and at the same time I did a very small building [the Logistic & Administration Centre AI in Gennevilliers] which was also won in a competition, and was nominated for the Equerre d'Argent prize given by Le Moniteur,





▶ so my office started to be known." With his Austrian references too, he was able to compete more effectively in the market.

One of the benefits of open competitions, he says, is that they are often proposed by public authorities who are less likely to have preconceived ideas about architects. "Mayors, for example, don't have particular architectural clients - they are usually building something as a once-in-a-lifetime process. You need to have an ambitious client to have an ambitious project," Feichtinger says.

He is confident that his background as an Austrian architect working in France was never an issue. "Maybe because! wasn't a famous Austrian architect who started to work in France - I was just another young architect in a small practice trying to make a name for myself." The competition process also helped in this regard, he says, since the discussion was always more about the project than about the names of those involved.

"I did the [Simone de Beauvoir] competition to win - I believed that we had a chance of winning, otherwise I would never have entered. When we were shortlisted, people around me were quite astonished, but for me this was just the first step. People told me I should be happy with being shortlisted, but I said that I wanted to win, why not? Otherwise you would not put the energy into the project. We even had to give an oral presentation, and since my French was not the most elaborate, I was really quite afraid."

The trepidation did not subside when he won, he says. "Now we had to build it, and this was really something. To build this bridge, in Paris, I knew what it meant. And I still say now, when we win competitions, that it's just a starting point. We are very active in the construction process till the very last moment - we visit the site a lot, and only leave the project once we have finished building it, not before.

"I really think that the construction process is one of the most important parts, and architects should not leave it to the contractor." But he acknowledges that architects can learn a lot from the specialists. They can recommend improvements to the detailing, for example, which make it easier for construction and improve the outcome. "We try to get as close as possible to something that is intelligent," he says.

As Feichtinger has already pointed out, the bridge took some eight years to reach

completion, due to a number of factors. "The main reasons why this bridge took so long -aside from the fact that there was a change in city government - were the impact of a major storm in France, and the opening of the Millennium Bridge in London, whose dramatic pedestrian-induced vibrations created shock-waves among owners of footbridges around the world. The fact that the city's Solferino Footbridge had also been found to suffer from this phenomenum led the client to demand that the design be reviewed and mitigation measures be considered. Even once dampers had been installed, Feichtinger recalls that there was a certain nervousness among the city engineers, given that the bridge was due to open the day just ahead of the national Bastille Day holiday.

Although Feichtinger claims that he does not have favourites among his bridge projects – they are all very different and have different stories connected to them, he says – it's clear that the Simone de Beauvoir Footbridge will always retain its significance for him. Not only was it a big challenge, in a very public and high-profile situation, but its location is significant for him, being in the first part of Paris he got to know when he worked on the competition for the Bibliotheque Francois Mitterand. The role the footbridge has played in the redevelopment of the area – which he has witnessed during his time in the city and was able to contribute to – has been dramatic and undeniable.

While Feichtinger's bridge projects represent only a small percentage of his office's output - he estimates no more than about 10% - it's notable that Simone de Beauvoir is not the only high-profile bridge project in his portfolio. He was also the architect for the new crossing to Mont St Michel which opened in 2014, the setting for which could arguably be said to be even closer to the French heartland than Simone de Beauvoir's capital city location. The project involved designing a 1.8km-long bridge to create a fixed link between the historic monument and the mainland, enabling the causeway to be removed and providing access to the island at all levels of tide. The resulting structure, an elegant, low and simple structure which he designed with Schlaich Bergermann Partner, was hailed as a triumph and has attracted many awards.

He admits that he did not fully appreciate the significance of this project until he started working on it. "Of course I knew of Mont St Michel, but I did not realise just how important this is to France, as a monument, and that to do something at this site would be such a delicate issue." Moreover he did not appreciate just how much exposure the project would bring in terms of media interest. "The biggest challenge here was to be so visible. It was very challenging both from a high level, when you are dealing with a World Heritage site, and right down to the smallest level, with the commercial impact on local businesses of the change to the arrival and departure points for the many tourists."

One of the most exciting aspects of the finished project is the experience for pedestrians, he says. When the tide comes in, and is so close to the deck, it is almost as if you are walking on water and this is a really special thing, he says.

The frustration of not seeing your project built is naturally a common theme among bridge designers, but when it is replaced by a solution you believe is wrong, it can be particularly galling. Feichtinger recalls his proposal for a railway viaduct in Hafencity in Hamburg, Germany, which was ultimately ditched in favour of an embankment. "From an urban point of view it's a very poor solution," he says "because a viaduct would create transparency and connectivity but now there is a wall. It's an example of how important it is to get infrastructure right in an urban environment."

Although best known for his footbridge portfolio, he reveals that his office is currently engaged on the design of 5km of viaduct and station as part of the Grand Paris Express, a 200km extension of the metro. "There are a lot of constraints, but this is normal. We are traversing existing neighbourhoods, small towns and future towns, so the impact of what we are doing is quite big, but we are still looking for something that is able to be a positive element in the landscape. The issue of transparency and continuity between neighbourhoods is quite crucial."

While he is clear that his practice is having significant input into the design, he acknowledges that there are a great many constraints and that he has to work with the engineers responsible for designing the whole line - not a partnership he would necessarily have chosen. "We are doing it in steel to try and make it as transparent as possible, and



this was a big discussion between us because a lot of the rest of the line is being built in concrete. I think it would be very very different if we were not involved."

How does he choose which bridge projects to compete for? "These days competitions are mostly by invitation," he says. "Sometimes we are asked but not very often. For others you have to apply to be invited, and usually in that case we have to decide whether we will be able to respond to the invitation properly or not.

"Also we are sometimes limited by the references needed – nowadays there is a move to putting a time limit on references, so it's not just a case of having the right references, they have to have been done within one or two years. I'm trying to convince people that the decision by a jury should be much more about the sensibilities of the architect rather than their references. Otherwise how do you start? But the world doesn't seem to turn that way. It's a poverty in judgement in my opinion."

He offers up the Three-Countries Bridge over the Rhine River between Germany and France as a good example of the collaboration between architects and engineers. For this project – a 250m-long bridge for pedestrians and cyclists with a 230m-long steel arch – he worked with fellow Austrian Wolfgang Strobl of Leonhardt Andrä & Partners on the design. The competition was by invitation, and Feichtinger was not initially invited, but he recalls finding out about it and calling up the organisers to ask if he could participate in a team with LAP. "So in fact it was two Austrian guys masquerading as a French/German team," he grins. He had studied with Strobl in Graz so they already knew each other well. Feichtinger recalls that there was quite a lot of opposition to his concept at LAP, where they thought a suspension bridge would be the best solution. "For a long time we had to struggle to get this design accepted. The senior engineer on the team thought it was too complicated, especially in steel, that it would move too much, and if it was going to be an arch, it would be better in concrete." But eventually, after many discussions in the office, an acceptable solution was found, and Feichtinger explains that being able to build it alongside the river and float it into place was considered a great benefit.

"Often the question arises of what is engineering, what is architecture, and who is doing what. There are very few footbridges between France and Germany, and in this case it was a much stronger case to make an arch, rather than a suspension bridge, for the symbolism of the connection," he says.

"Although it was not an obvious solution from an engineering point of view, Wolfgang understood what I was trying to achieve. I thought the bridge could turn out to be more of an obstacle to the view, which is why the cross-section of the arch is asymmetric. Sometimes the solutions that come from us – and by that I mean architects – are not always rational but often we try to find something different. We take the concept a bit further

beyond the obvious than an engineer might."

Often it's about a new viewpoint - bridges allow you to be somewhere where you were not previously able to be. For example on the Butterfly Bridge in Copenhagen harbour, Feichtinger created a viewpoint in the middle of the crossing from which three spans splay out to the three quay walls. A more obvious solution would have taken only two spans to cross the two waterways, but Feichtinger wanted to give users the opportunity to enjoy a different view towards the castle. He admits it would have been easier to place the mechanical parts of the opening spans on land and having them in the water makes the operation and maintenance much more difficult, but says that the importance of the public space was the convincing factor for him. "An engineer working alone would have put the abutment on the land, not in the water, which they would have said was stupid idea. But it really is a nice spot when you go there, you feel it."

After almost three decades in France, Feichtinger admits to being settled in the capital, although his small office in Austria is still very much linked to projects that are done in France, and competitions. His unprepossessing office building in the east of Paris provides desk and meeting space at first floor level, with a generously-sized model-making studio at ground level - a necessity as far as Feichtinger is concerned, although he acknowledges that many architects would consider it a luxury.

He has no intention of focussing solely on bridges as some practices do, in particular since that would entail entering many more competitions. Instead he prefers to focus on bridge projects that he has a particular affinity for. Current bridge projects include a small floating bridge in the French city of Potitiers, a bridge over the Seine in Mantes-La-Jolie, an opening bridge in Willbroeck in Belgium, and a coastal walkway in Bastia, Corsica



nree Countries Bridge over the River Rhine between France and Germany (David Boureau)