Michel Desvigne Paysagiste developed tools for a unified design concept, a "Charte des Paysages", together with the city's office for Urban Ecology, Environment and Open Space Planning. The master plan of Bordeaux is a result of their work.

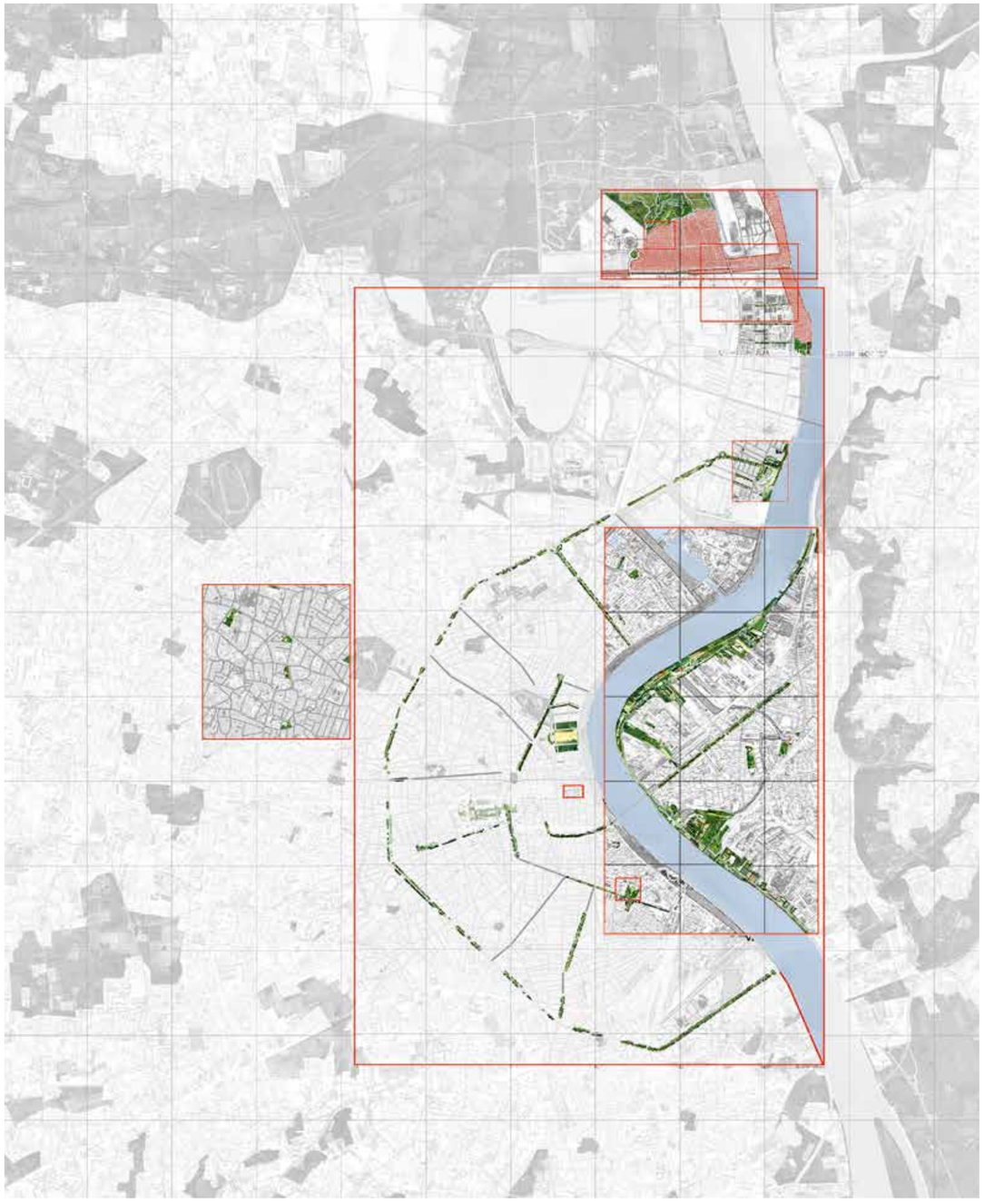
ADAPTIVE PLANNING

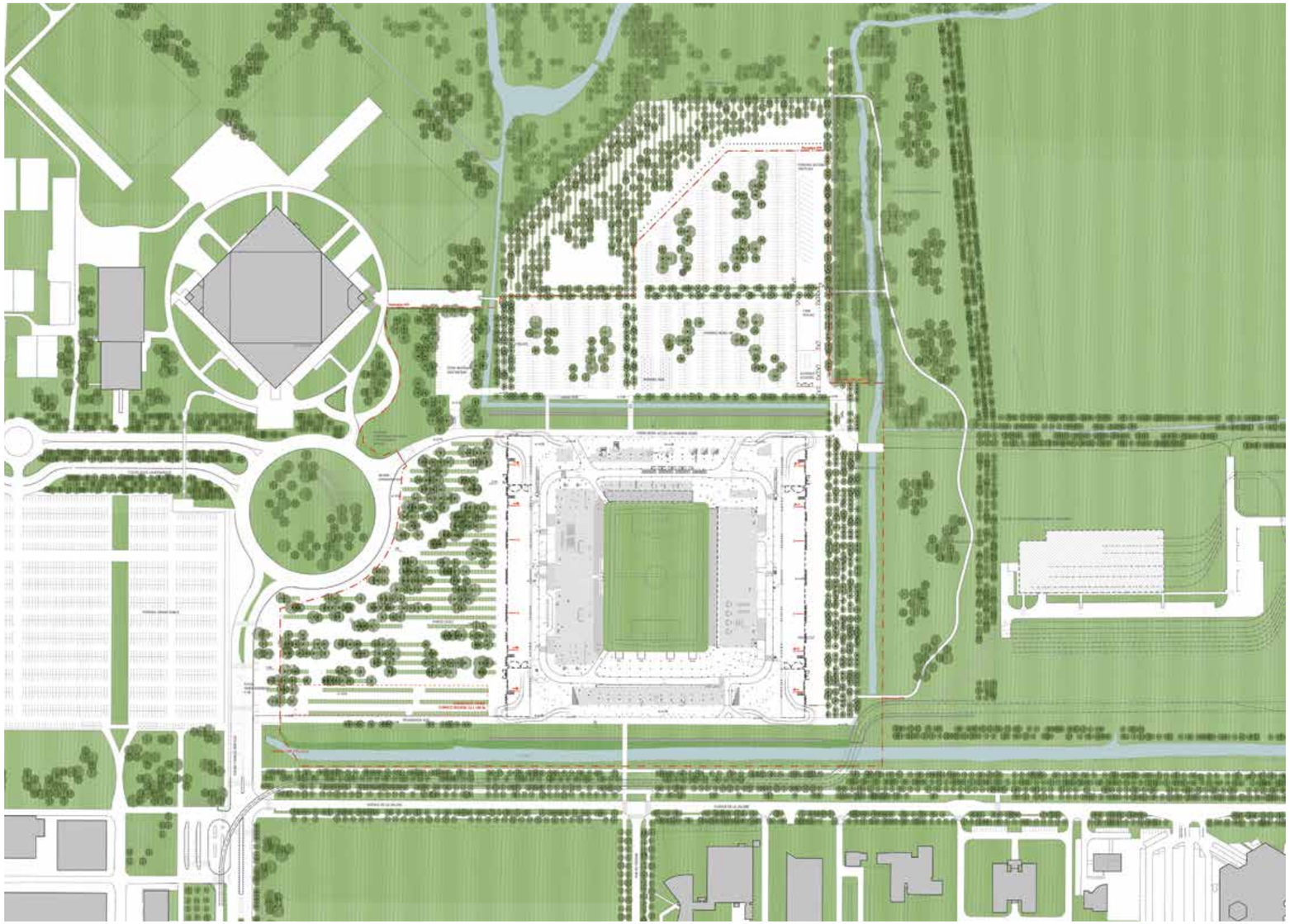
Bordeaux's open space has undergone continuous transformation since 2001. The urban area, however, has not been completely connected to this surrounding green space. In its search for the development of a connecting element, the city turned to landscape architects Michel Desvigne Paysagiste. Two projects completed in 2015 are a direct result of the office's master plan: the new football stadium "Stade Atlantique" and the riverbank park "Parc aux angéliques".

Michael Koller

The project of enhancing Bordeaux's green open space was originally conceived as part of the Green Plan in 2001. At that time public plazas in the city centre were continuously being rebuilt and expanded. At the same time, three new tram lines were also built. The general urban area, however, was still rather undefined and difficult to grasp in a spatial sense, as the historic city centre still had numerous vacant lots and there was a lack of connections between green open space areas and the plazas. In 2005 Paris landscape architects Michel Desvigne Paysagiste were commissioned by the city of Bordeaux to develop a plan of how to improve and enlarge urban open space. The office then drafted guidelines and developed tools for a unified design concept, a Charte des Paysages, or landscape charter. In association with this concept, they developed a concrete planning culture together with the city's office for Urban Ecology, Environment and Open Space Planning, which also took over construction of the projects. The method developed consisted of a series of case studies: The office analysed approximately one dozen projects and investigated each area according to its spatial unity, borders, typologies, levels, soils and open space structure. Trial plantings on site were undertaken as a result of this empirical approach in order to test the spatial, aesthetic, functional and ecological impacts. These methods replaced traditional regulatory planning documents and led to numerous changes and adjustments in existing development plans. They allowed for increased flexibility during the implementation of large-scale interventions, which needed to be achieved under the restraints of very limited financial resources.

Stade Atlantique Football Stadium. The redesign of the open space around Herzog & de Meuron's new Stade Atlantique football stadium to the north of the city centre also began with a variety of test plantings, which served as





The new Stade Atlantique football stadium was designed by Herzog & de Meuron and is located between the city's wealthy green belt and a number of green areas near the city centre. The stadium's car park was extended, planted and renaturalised.



prototypes for the later design of the stadium's forecourt. Before construction of the football stadium, which was completed in 2015 in time for the upcoming European Football Championship, began, the Parc Floral's existing car park was extended, planted and renaturalised. The new football stadium is located between the city's wealthy green belt and a number of green areas near the city centre. The entire area is part of a landscape design concept developed for Bordeaux's northern ring road. This landscape is structured by a strict geometric system of drainage canals built during the 17th century by Flemish master builders in order to recover additional agricultural land. The canals are often lined by rows of poplars.

The landscape architects were inspired by this historic element and added green verges with rows of trees to the paved surfaces they created. In doing so, the verges were cut into the original asphalt. The soil placed in the trenches they created was mixed with gravel in order to increase stability and then planted with both coniferous and deciduous trees. The linear arrangement of the trees in the parking areas is at times broken up by asymmetrical groups of trees planted between them. The surface, which was originally completely impervious, was thus made more permeable. The measures used proved to be relatively inexpensive as well: The system of tree rows, green verges and individual groups of trees uses simple elements to connect the stadium's forecourt with the parking area and the existing hedges, groups of trees and habitat edges on the site's periphery.

Parc aux angéliques Riverbank Park. As with the design of the open space around the football stadium, very little money was available for the Parc aux angéliques, partly because this project was not originally part of the urban development concept. In the course of developing the landscape charter, Michel Desvigne Paysagiste suggested that the city create a new park on the right bank of the Garonne River in order to once again make the river accessible for residents, thus making it a key element of the proposed urban development areas. In order to actually build the park, the city first had to raise money for both the purchase of the land and the financing of the planning and construction. In addition, the original land use plan had to be rededicated from building land into parkland, as original plans called for the construction of buildings right up to the river's edge. The quays and riverfront of the city's densely built centre along the Place de Bourse were redesigned by



The Parc aux angéliques lies opposite the historic city centre on the far side of the river and forms a contrast to the city by retaining the natural shape of the riverbank. Linear rows of trees run perpendicular to the river.



French landscape architect Michel Corajoud and completed in 2006. A broad promenade paved with natural stones provides a transition to the river in this very urban environment.

The Parc aux angéliques lies opposite the historic city centre on the far side of the river. With this new park, Michel Desvigne Paysagiste wanted to create a contrast to the city and did this by retaining the natural shape of the river bank. The terrain here consists of long parallel plots that run at right angles to the water and stretch from existing railway lines through a former industrial area up to the river. The division of these plots is a result of the former industrial area, which in turn owes its structure to that of the original agricultural land. Just as near the football stadium, these lines trace drainage canals that used to divert overflowing rain water into the river.

Michel Desvigne Paysagiste's proposed planting concept, some of which has already been planted, and the park's circulation system pick up on the site's original layout: Linear rows of trees running perpendicular to the river suggest the erstwhile industrial plots. Groups of trees and small wooded areas of varying densities are found between these rows. Glades and meadows provide places where people can sit and relax. The riverbank, with its proliferation of wildly growing grasses, looks somewhat like a prairie. This design was consciously chosen, because the park's location on a bend in the river and the tidal nature of the river mean that there is a great fluctuation in water level and regular flooding. When finished, the Parc aux angéliques will have a total size of 40 hectares. Approximately 5 hectares, the so-called Queyries section, are now complete. Construction was begun in 2010 and the park will be fully completed in 2017. To date approximately 3500 trees, most of which are native species, have been planted.

Bastide-Niel and Brazza. The transformation of these green open space areas goes hand-in-hand with several architectural and urban planning projects. In addition to the football stadium by Herzog & de Meuron mentioned above, there is also an urban development plan for the Bastide-Niel neighbourhood drawn up by the Dutch office MVRDV and an urban expansion concept developed for the new urban neighbourhood of Brazza by the Lebanese office of Youssef Tohme Architects. Parc aux angéliques serves as a connection between these two new urban areas, both of which are predominantly residential in nature. Additional schools, offices,





Michel Desvigne Paysagiste analysed the different areas according to their spatial unity, borders, typologies, levels, soils and open space structure. Trial plantings on site were undertaken which served as model for the future planting concepts.

shops and sports facilities are being planned for both of them. Both MVRDV and Youssef Tohme Architects draw on the histories of these areas: They have used the scale of the original industrial buildings and are interpreting their typology and design vocabulary in a new way.

The design of the open space between the buildings assumes a mediating role: It ensures that a link between private and public areas is provided and runs through the built-up areas in the form of greenbelts, paths and rows of trees. Michel Desvigne Paysagiste was also directly involved in the development of the plan for the Brazza project, which is the more northerly of the two. A new tram line is planned for this area as well, in order to link it to the city centre.

Three Factors of Success.

Landscape planning is a very lengthy process which requires a great deal of resilience. The expansion of the park along the right bank of the Garonne River will progress gradually over the next ten years and will ultimately be complete only when the Bastide-Niel and Brazza urban development areas are also finished. At the same time it can be assumed that the original *Charte des Paysages* will be extended beyond the borders of the city as part of the administrative and functional restructuring of the city of Bordeaux and the integration of surrounding communities in the "Bordeaux Intermunicipal Association". Construction of the Jean-Jacques Bosc Bridge in the southern part of the city – the Dutch firm OMA together with Michel Desvigne Paysagiste won the design competition in December 2013 – is the first project of this kind. The landscape architects provided an extensive redesign of the riverbanks in order to better integrate the bridge into the landscape, a plan which was not part of the original charter drawn up in 2005.

Three factors have made Bordeaux's landscape charter a success. First of all, landscape planning was not given less priority than urban development in the design of the right riverbank, but in fact led the way. Secondly, a strong partner, i.e. the community, has actively supported the implementation of the individual interventions, especially in the political arena, in order to guarantee that development will continue for the time needed to complete the work. And thirdly, despite having a small budget Michel Desvigne Paysagiste was able to provide the city with high-quality projects, and ones which can be adapted to future needs.