



Renzo Piano and Peter Rice

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FONDA
ZIONE
RENZO
PIANO

Ove Arup maintained that the collaboration between architect and engineer would work if the former was a “master-builder” and the latter a “humanist.” This formula is the most accurate description of the long friendship and fraternal collaboration between Renzo Piano (1937) and Peter Rice (1935-1992).

From the site of the Centre Pompidou in the early seventies, where they met, until Peter Rice’s untimely death in 1992, the two worked side by side on the design of the Menil Collection, Houston (1982-86), Kansai International Airport, Osaka (1988-1994), and a myriad of curious projects from the Atelier Piano & Rice, set up in 1978 and active until 1980. The dialogue between Piano and Rice went far beyond the relations that conventionally exist between an architect and an engineer, in which the former is responsible for the spatial conception of the work and the latter for supporting it with structural principles designed to make it solid and durable. Both driven by an ardent experimental curiosity, the meeting of the Italian architect with the Irish engineer was favored by a common methodological instinct towards the hybridization of skills. The works produced by their partnership testify to the need to employ industrial processes in architecture – hence prefabrication – but also the belief that this mechanization of architecture should not eliminate the contribution of human ingenuity.

Photo 1_Renzo Piano and Peter Rice check the thickness of the ferrocement of the leaves roofing the Menil Collection.

Photo 2_Peter Rice, Renzo Piano and Richard Rogers straddling one of the gerberettes.



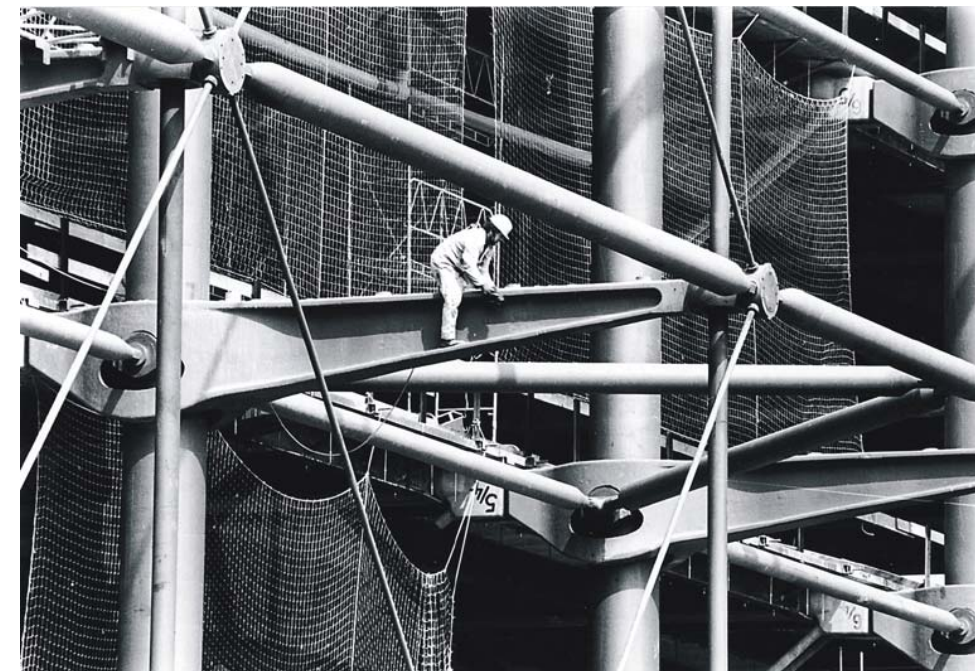
“We have to use industrial techniques,” Rice claimed, but “what is needed is something that restores the human scale and human involvement to buildings.” A belief similar to what Renzo Piano summed up as the need to “find the traces of the hand in buildings.” This means taking advantage of the possibilities that information technology opens up for architectural design, but attempting a possible fusion with the craft procedures in which both Piano and Rice have always felt an innate interest.

It is no coincidence that the projects that owe most to the contribution of the two designers are distinguished by pieces that weld the reasons of form with those of structure: the gerberettes at the Beaubourg; the ferrocement leaves of the Menil Collection; the toroid section of Kansai International Airport.

For Peter Rice “the Beaubourg gerberette is an apparently architectural choice that could only have been made by an engineer.” As one observes and walks through the Centre Pompidou it is impossible to separate the contribution of the architects from that of the engineers. And the gerberette – the element that connects the beams to the structure of the façade – puts the seal on this design method. In the gerberette Peter Rice and Renzo Piano (with Richard Rogers and the many collaborators who thronged the Plateau Beaubourg in those years) managed to give beauty and humanity to 11-ton steel castings. In these pieces, not a single gram of material is redundant to the static functions, and at the same time the gerberettes were immediately recognized as an aesthetic element of the Beaubourg, like the systems ducting rising up the façade on rue du Renard, expressionistically painted in bright colors.

Photo 3_ Gerberettes recently cast at the Krupp plant in Germany.

Photo 4_ Installation of the gerberettes during work on the Beaubourg.



The leaves of the Menil Collection are another product of this design method. Developed after long study using models, the form, curvature and thickness of these roofing elements are enduring testimony to the confidence that Piano and Rice had in transforming matter, and an indication of the privileged places of the project: the laboratory models, the material modeling workshops and the construction site.

A similar experimental intensity emerges from the work of the Atelier Piano & Rice. Despite being active for only two years, between 1978 and 1980, it developed a large number of projects, not always concerned with architecture. An experimental car for FIAT, which considerably reduced the weight of the bodywork, the production of a series of documentaries on the history of architecture for the RAI, the construction of a housing complex built out of prefabricated elements at Corciano, and the innovative experiment in soft restoration work in the neighborhood laboratories for UNESCO were just some of the Atelier Piano & Rice's projects. These experiments went beyond architecture as conventionally understood, but they enabled the two designers to develop innovative solutions, understand the properties of materials and solutions of industrial development that they would reintegrate into projects of the following decades.

Photo 5_Renzo Piano and Peter Rice check the thickness of the ferrocement of the leaves roofing the Menil Collection.



In the late eighties, in the design of the great terminal at Kansai international airport, Osaka, the collaboration between Piano and Rice made a qualitative leap. The design tension that the two had so far directed at the modeling of a component was extended to the whole building. The section of the large inverted hull – also devised in collaboration with Tom Barker, the brilliant engineer who often works on RPBW projects – testifies to the coincidence between structural and environmental precepts and architectural form. The toroidal section makes it possible to channel the oceanic winds inside the terminal, triggering the natural ventilation of its interiors and minimizing and standardizing the form and dimensions of the metal scales of the extrados. At the same time, in the intrados, the structure, undulating and asymmetric, exhibits exposed beams “repeated with the regular rhythm of filigree work.”

Regrettably, Peter Rice’s unexpected death in 1992, while construction work was coming to an end on the Osaka terminal, cut short the collaboration between the two designers. Two decades spent working together, sealed by friendship and esteem, prompted Peter Rice to observe that “Renzo Piano’s work is different from the work of other architects and architectural firms,” while Piano mourned for Peter Rice, “engineer and humanist, an irreplaceable traveling companion for twenty years.”

Photo 6_Peter Rice, Renzo Piano and Richard Rogers straddling one of the gerberettes.

Photo 7_The intrados of the toroidal section of Kansai International Airport terminal, Osaka.

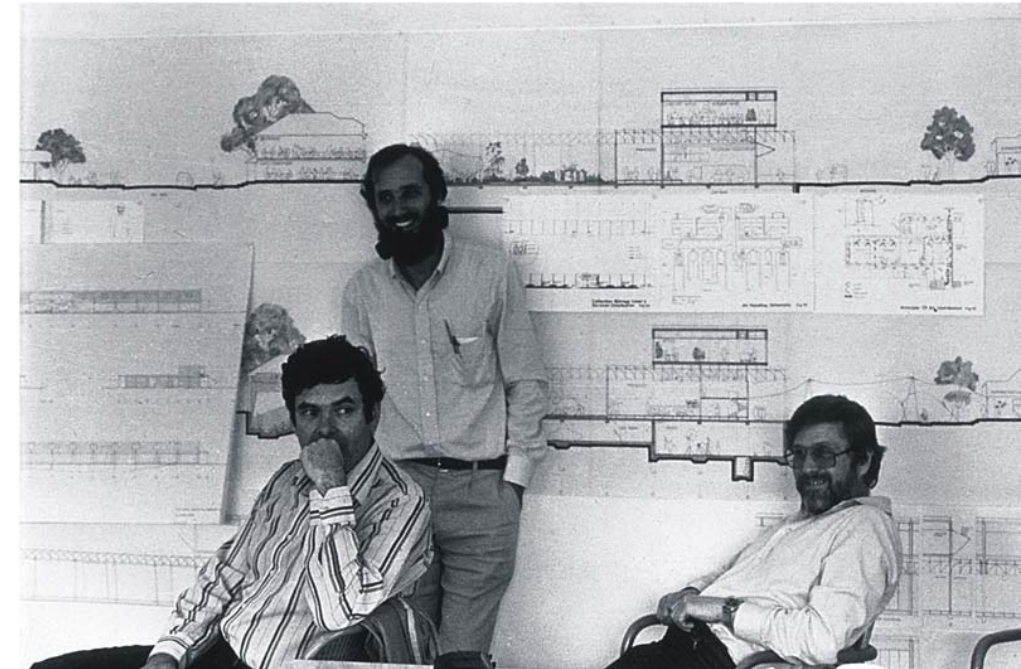


PHOTO CREDITS

Photo 1, cover_Renzo Piano and Peter Rice check the thickness of the ferroocement of the leaves roofing the Menil Collection, 1983.

The Menil Collection, 1980/1987
Renzo Piano Foundation Archives, Men__099
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Photo 2, pag. 3_Peter Rice, Renzo Piano and Richard Rogers straddling one of the gerberettes, 1974.

Centre Georges Pompidou, 1971/1977
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Photo 3, pag. 5_Gerberettes recently cast at the Krupp plant in Germany, s.d.

Centre Georges Pompidou, 1971/1977
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Photo 4, pag. 5_Installation of the gerberettes during work on the Beaubourg, s.d.

Centre Georges Pompidou, 1971/1977
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Foto 5, pag. 7_Renzo Piano and Peter Rice check the thickness of the ferroocement of the leaves roofing the Menil Collection, 1983.

The Menil Collection, 1980/1987
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Foto 6, pag. 9_Renzo Piano with Peter Rice and Tom Barker during development of the Menil Collection project, 1981.

The Menil Collection, 1980/1987
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Foto 7, pag. 9_The intrados of the toroidal section of Kansai International Airport terminal, Osaka, s.d.

Kansai International Airport Terminal Building, 1988/1994
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