

Portrait by Alain Charre (1949-2018)

Richard Bender, civil engineer, architect and urban planner

"I'm organizing the sculptures in the space,

I am more concerned with mapping and circulation than with image"

Richard Serra, *The Hedgehog And the Fox (le hérisson et le renard)*(1998)

Why should the words of Richard Serra be used as the epigraph to a text devoted to Richard Bender? One is an artist, the other an urban planner. The latter supervises the organisation of towns; the former creates space through the use of sculpture. What do they have in common? Firstly, the positive confrontation with their materials, an appetite for building. Secondly, a fine-tuned awareness of large scale and circulation flows. Thirdly, they have the same requirement for accuracy and effectiveness of the response that is to be given. Lastly, a modesty in proportion to the quality and the breadth of their respective work. But what brings them even closer together is that each knows in his own way that uncompromising interactions between art, architecture and the urban universe encourage the cultural energy necessary at their numerous points of contact.

Learning to build

When the career of an urban planner, architect or artist – be he in music or the plastic arts – takes roots in childhood, we talk of vocation, and barring any mishap, their route to success is assured. There has been no mishap in the course that Richard Bender has traced. The man who is today an architect as a small boy was fascinated by the buildings of 1930s New York; he is also the civil engineer with a passion for materials and driving forces in construction; he is also the urban planner who manages the hierarchy of spaces and who knows Tokyo and Japan better than Frank Lloyd Wright. What goes around, comes around: did not the adolescent Bender write to the author of *Broadacre City – Disappearing City*, who sent him a reply? He warned him against the architecture schools and, perceiving his strong interest in construction, advised him to opt for a school of civil engineering.

In New York in the Forties the spirit of Walter Gropius, the heroic founder of Bauhaus and the modernist movement which was causing upheaval in American aesthetics, moved through architectural circles like a lover. However, in 1947, the young Bender entered the *Building Construction Engineering* department of MIT, from which he would leave with his degree in 1950. Despite its incontrovertible reputation, teaching of town construction at MIT was strictly technical. Stripped of any dimension of urban culture, town planning is nothing but road networks and regulations. Bender felt that if one aspires to take part in person in urban construction, one has to admit that the decision belongs to the architect. But from his time at MIT, the engineer who had chosen to become architect would retain a confirmed interest in the invention of new technical construction methods (hoisting, loading and transport systems...), and even in the construction of towns to which he would much later devote

himself. In 1951, when the famous UNO building in New York was being completed, Bender, who as an adolescent had worked as runner on the worksite and served coffee to the Rockefellers and Le Corbusier, was employed for a time by Wallace Harrison. Thanks to his engineering experience, he was put in charge of the metal appraisal for the building. A while later, Rockefeller was to back up his researches at MIT to provide a solution to the technical problems of building housing for the nation's poor.

The civil engineer working for public housing

Housing conditions in the United States after the war had led to the construction of shoddy shanties. The American artist Dan Graham, working in a new genre in that direct reference was made to the environment and to public housing, declares in his first work entitled *Homes for America*, 1966: "*The new town is made up of 'residential lots'. They can be seen everywhere. They bear no particular reflection of the communities that they house. They contribute nothing to the development of a region or an individual.*" Much more contentious, following a critical analysis that had repercussions and influence in the United States, the sociologist Jane Jacob in 1961, published *The Death and Life of Great American Cities*. In this work she expressed the imperative need, in the construction of American suburbs, to consider social interactions, cultural interweaving and "*organised as well as disorganised complexity*" crushed with dangerous indifference by uniform strip building (like the enormous French complexes, ghettos that today we call "estates").

The passion of Richard Bender for architecture has always gone hand in hand with the social dimension that he finds imperative. Aware of the problems connected to housing and the dangers they harboured in the medium and long term, he set out to participate in the production of housing for American workers. Spurred on by his reading of Jean Prouvé and Buckminster Fuller, he concentrated on prefabrication, an efficient merging of his engineering and architect's skills, to create high quality, low cost public housing. When Rockefeller thought up a project to stimulate the development of new techniques for low-cost housing in South America and Africa and set up IBEC, the International Basic Economy Corporate, Bender was able to harness all his skills. In conjunction with engineers from MIT, he undertook to reconvert the use of enormous hoisting and hauling machines designed to lift the huge weight of an aeroplane crushed on a runway. Such technical capacity was capable of transporting entire concrete houses so that they could be moved and finally placed on a concrete slab. Pre-cast in a mould, the exceptionally speedy production of housing held enormous economic advantages. But this was not all – it offered its inhabitants complete independence. A first experiment with 94 houses was conducted in Virginia. Other projects took place in Seattle, but also in South America and in Africa. The sober modernist aesthetic offered the least possible amount of coercion and provided family living spaces with large windows opening onto the outside. During the same period other American architects, such as Craig Ellwood, proposed basic housing, built rapidly and meeting the expectations of the middle classes, since the architecture was explicitly modernist, very open-plan and modular. Richard Bender's project was differentiated by the technological invention of the implementation, an alloy of the engineer's force, the architect's concern and social welfare. While not liking the houses themselves, Walter Gropius appreciated the idea of them and

approved of Bender's ingenuity; he was then able to join his studio at Harvard to change profession, from civil engineer to architect. At the end of his studies, in 1956, Bender married the novelist **Sue Bender**, and went to live for a time in Europe – more specifically, in Switzerland.

To the wellspring of modern architecture

Why in Switzerland? Because there prevailed a debate on modern architecture dating back to before 1928 when the Swiss Château de la Sarraz saw the institution of the International Modern Architecture Congresses, CIAM, which gathered together theorists and architects from every Western country. Indeed, twenty years earlier, the creation of the Federation of Swiss Architects, FAS (1908), had been the main origin of the interprofessional debate on the conditions of architectural creation. Already sensitive to the artistic status accorded to the "architectonisation" of what would later come to be called concrete art, the FAS, under the direction of Karl Moser, was not without its echo in Bauhaus, created in Weimar in 1909. In these convergencies can be seen the roots of modernity and its interdisciplinary methods. In the Fifties, when Richard Bender decided to take an up-close look at the nature of the doctrinaire jousting, a certain number of architects such as Alfred Roth who worked with Le Corbusier in Stuttgart or Werner Max Moser who was a member of Frank Lloyd Wright's agency and was invited to Harvard, demonstrated the necessary internationalisation of architectural theory. Mixing with these experienced men, Bender worked with Rudolf Steiger, another founder of CIAM with whom he drew up the plan for the Nuclear Research Centre in Geneva and the Synchrotron on the French-Swiss border (1956-1958). Among the architects on the Swiss scene, Max Bill, better known as an artist than an architect, initiated a fruitful debate against Post-war Modernism. To reconcile "*beauty from function and beauty as function*" connotes that the form is essentially dependent on the architectural structure inherent in every object. The aesthetic has a constructive value. In his text "*The New Simplicity*" as well as at the Ulm Hochschule für Gestaltung of 1956, Max Bill set out to demonstrate that the architect must act like an artist whose job is architecture. This close structural connection between art and architecture which was to inspire the later generations of Basle architects (Herzog and De Meuron, Diener and Diener) echoed the conviction of the American, who declared that the success of a project involves the merging of the artist, the architect and the engineer. Although he did not give up everything to the Swiss "all design", Bender discovered his own interest in the integration of disciplines and the extremely positive effects of the Swiss debate.

Back in New York, in 1959 Richard Bender joined the agency of the Viennese Paul Lester Weiner who was one of the founders of CIAM and who in 1930 had created the Town Planning Associates in association with José Luis Sert. **Before becoming a full partner himself in 1964**, Richard Bender worked in numerous towns in South America and drew advantage from the close professional relations of Sert and Weiner with Le Corbusier. Related to Franklin Roosevelt by blood, Weiner had the possibility of helping a great number of people leave Hitler's Germany, one of them being Albert Einstein. He then arranged a meeting with Le Corbusier who wished to have the physicist's opinion on his modulator – the latter would fail to understand why man was still the measure (too unscientific) for

architecture! Bender, who was present at this historic encounter, photographed the two great men of the century... When Sert succeeded to Walter Gropius' chair at Harvard, Paul Weiner was left to direct the Town Planning Associates alone, which allowed Bender to take on greater responsibilities before leaving New York to teach at the University of California at Berkeley from 1969.

Questions of scale

Professor Richard Bender's basic pedagogic vision was rooted in the fruitful crossovers between the most various disciplines. It is in movement that the town spreads itself, it is in movement that it must be conceived. Clearly, even if today its ideological limits have been demonstrated, Bauhaus remained the beacon illuminating his lively, creative teaching. When he was a student at Harvard in the studio of Walter Gropius, all professions worked together, the City Planners, landscapers, sculptors and ceramic artists. Not only did Bender never lose this confidence in the dynamic confrontation of disciplines, he even made it the cornerstone of all his activities, as urban planner and as teacher. The Center for Environmental Design Research, where he was professor, had originally been intended to house cookery schools – even today weaving is still taught there. The very important place given to landscape, whether agriculture or forestry, completely changed the teaching scale and endowed the Landscape School with a really revolutionary quality.

If Harvard University, much smaller than Berkeley, tended to sideline art, the West Coast, by contrast, allowed architects to work with artists, musicians, musicologists, lawyers and doctors. All that remained was that the buildings themselves should stimulate these crossovers. The environmentally designed School of which Bender became Dean resolved the question by changing the position of the classrooms for a logistic of circulation that led to the joint use of teaching spaces, encouraging exchanges between students from different fields. Hardly an anecdotal detail; on the one hand because Berkeley amounts to a small town inhabited by 50,000 people and has to organise these meeting places, and on the other hand, because the consequences of the architect's decision were theoretical: the crossover between sciences, technology and art not only as regards ideas but also in day-to-day life still presents a fundamental challenge today. In this organisational design, at once minimal and structural, we can see an example of what is called "*smart planning*", which Bender developed with the architect Paul Enquist of Skidmore, Owings and Merrill of Chicago. In this regard, Richard Bender pointed out that the European experiments in metropolitan landscape design such as those of François Asher (in France), Bernardo Secchi (Italy) or the Austrian Thomas Stieverts all start off from the large scale of the region to arrive at that of the street, whereas the American model develops in the opposite direction: from street to region.

Working the pivotal areas of an architectural as well as a geographic location, from small scale to large scale, is what Bender was to teach, something he himself learned from the demanding architects alongside whom he had worked throughout his professional career. These are the qualities that were to make him the first foreign visiting professor at Tokyo University in 1976.

The other Bauhaus

Among the sites on which Richard Bender worked in the Japanese environment, Roppongi Hills and Naoshima are shining examples. The first is one of the most densely-populated points in the urban fabric of Tokyo, the other is an island, an insular landscape of exceptional beauty. But in both cases, what is Richard Bender's theoretical and pragmatic base, namely his capacity to summon up the largest number of cultural agents in urban construction, is developed with the highest quality and perhaps with the greatest serenity. It is not enough just to comfort oneself with the lullaby of beautiful, noble ideals – one has to work to make them a reality. There is nothing nostalgic in Bender's thinking as regards Bauhaus. Bauhaus is an idea that has been achieved and that we have inherited. If a heritage is not reclaimed, it becomes depleted. Only by truly reappropriating it can there be reinvestment under new conditions of development. It is here where the monumental work of the American urban planner can teach us so much.

This continuation of the 20th century's founding principle finds particular expression in the Japanese spaces, through a precision in the observation and handling of scales varying from one element of the landscape to another. Here it is appropriate to borrow Peter Eisenman's term "*scaling*", that is, the simultaneous creation of different scales depending on the point of view adopted to observe certain instants in the urban physique. Scales of time are added to scales of space. In this, the quality of Richard Bender's designs relates not only to one's observation but also to an awareness of the density of the problems to be resolved. A similar design science can be found in Bertrand Warnier, one that substitutes writing and replaces words. For both of them, the elasticity of the gaze identifies the dimension of the sites. Design peels away the surface of the world. Design is the gaze of the urban planner: it superimposes scales just as Bender and Warnier superimpose disciplines, countries, experiences. The intercontextuality of any urban project can only be apprehended through the discipline of the pencil, it is the condition enabling Bauhaus to be, not a ghost that has not been laid to rest, but the threshold necessary for the productive merging of cultural forces forging the first years of the 21st century.

In the Spring 2004 edition of the journal *UCL News*, mouthpiece of the Center for Environmental Design Research of the University of Berkeley directed by Richard Bender, the Naoshima island project is presented as: "*A Twenty-First Century Bauhaus*". With vision, the distinction is made right away between the heavy industry conditions existing at the time of the first Bauhaus and the "soft" energy of the knowledge society capable of re-founding other points where the art and the life of a town can be brought together from construction to consumption. "The goal is to identify and develop twenty-first century 'knowledge industries' that are 'small and global', light, agile, and networked, and to combine them with a new aesthetic and a spiritual sensitivity that both respects ecology and sustainability and builds on major advances in science and technology." (1)

The Naoshima project for the Benesse International Institute for the Arts, begun in 1990, was drawn up with a team of students from the Urban Construction Laboratory. Tadao Ando constructed most of the buildings, among them the ChiChu Galleries.

The Roppongi project is of a different type, but one can discern the same replication of functions thanks to a coexistence and an interweaving of cultural spaces placed at the foot of a

monument-skyscraper emerging, in the same way that others do today, from the urban sea that is the Japanese capital. In the very centre of a populous district, numerous restaurants, locales for recreation and promenade, but also an academy of art and another of music, art galleries, as well as a concert hall, all form different combinations at different hours. The building belongs to a large Japanese investing family, the Mori. An enthusiast of the emblematic figure of Le Corbusier – both painter and architect – the son of the Mori family invited Richard Bender to revisit these highly sophisticated public places where residential space mixed with offices, sports facilities and high-quality cultural amenities. Characteristic of Japanese society, this concentration of every type of activity found in Richard Bender the most experienced and demanding of orchestral conductors who, with the accuracy and efficiency of a few precise lines, makes the spaces and their combination self-evident. In a country where the very notion of space is a far remove from what Western perspective has made of it, it is not so easy to work with the urban grids, nor even to negotiate them. The simultaneous science of detail and "megascale" - stepping up from street to region – allied to a sense of the strategy between the urban planner and project manager had demonstrated its relevance both in Roppongi and Naoshima. "*Urban Planning is a long-lasting work.*" Bender says.

Because on the one hand he keeps Utopia at a safe distance, although without rejecting it, and on the other hand he is free of the Japanese myth, unlike an entire generation who saw in Japan the image of the future or, like Rem Koolhaas in particular, the expression of chaos, Richard Bender is predisposed to maintain a natural relationship with Japan.

Condensation and displacement

The life of a man cannot be summarised, even less so when his work extends over every continent and his history has coincided on numerous occasions with the greater history of architecture. We can only evoke him. The list of the major projects by this civil engineer, architect and urban planner, three figures in one, is exceptionally long. Beginning with his participation in IBEC where inventiveness was combined with generosity in the United States and in South America, it carries on to Switzerland with the CERN in Geneva, to the Middle East with the Hebrew University of Jerusalem. He has performed consultation work for the Public Development Corporation of Cergy-Pontoise, as well as for the Disney Corporation at Eurodisney, as well as in Japan, apart from those examples already mentioned, for the new towns of Makuhari and Tama, but also in Hô Chi Minh City, San Francisco and Aspen, Colorado. In Italy, Bender was involved with the University of Ferrara in the restructuring of the region of Vicenza – homeland of Palladio –, Perugia and Commaccio in Umbria, and once more in Japan, in Yokohama and Okayama and, in 1995, in Kobe. His research and teaching have dealt with subjects such as *The Urban and Social Implications of High-Rise Buildings* (which he has never particularly favoured) and *The Implications of Changes in Work and Workplaces on Urban Form*. He has also with his students at Ark Academy on the campus of the University of Keio. He has furthermore acted as consultant for the P. Getty Trust in Los Angeles as well as for the Georges Lucas' Skywalker Ranch organisation and on the Strategic Plan for Mediapolis in Taipei, China as well as in Melbourne. Although he has been officially retired from professional life since 1989, he still consults in most of the places where he has been called on to work, as well as at the University of Tokyo and the Cergy-Pontoise

International Workshops of Town Planning and Urban Design. Lastly, he has contributed to several works on Urban Planning drawing on his international experience.

Having reached the age of retirement, this unfeasibly youthful man, born at the time of the Great Crash, accompanied by his radiant wife, declared that he would finally be able "*to begin thinking about the future*"! After trying to follow him throughout his career, we can be sure that art, architecture and towns will still keep their hold on his dreams - they were already rocking him in his cradle in infancy. Indeed this is surely what he shares with Richard Serra: firstly, pleasure in his materials and the insatiable hunger to build; secondly, the sense of the integration of small- and large-scale circulation flows; and thirdly, the tranquil distraction that produces the capacity for accuracy and efficiency. Today, with the modesty of the tireless creator, Richard Bender effortlessly teaches us that only culture, fruit of the most eclectic skills and intelligence, still unfolds the future. "*Nowadays landscape is the most important thing,*" he said.

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