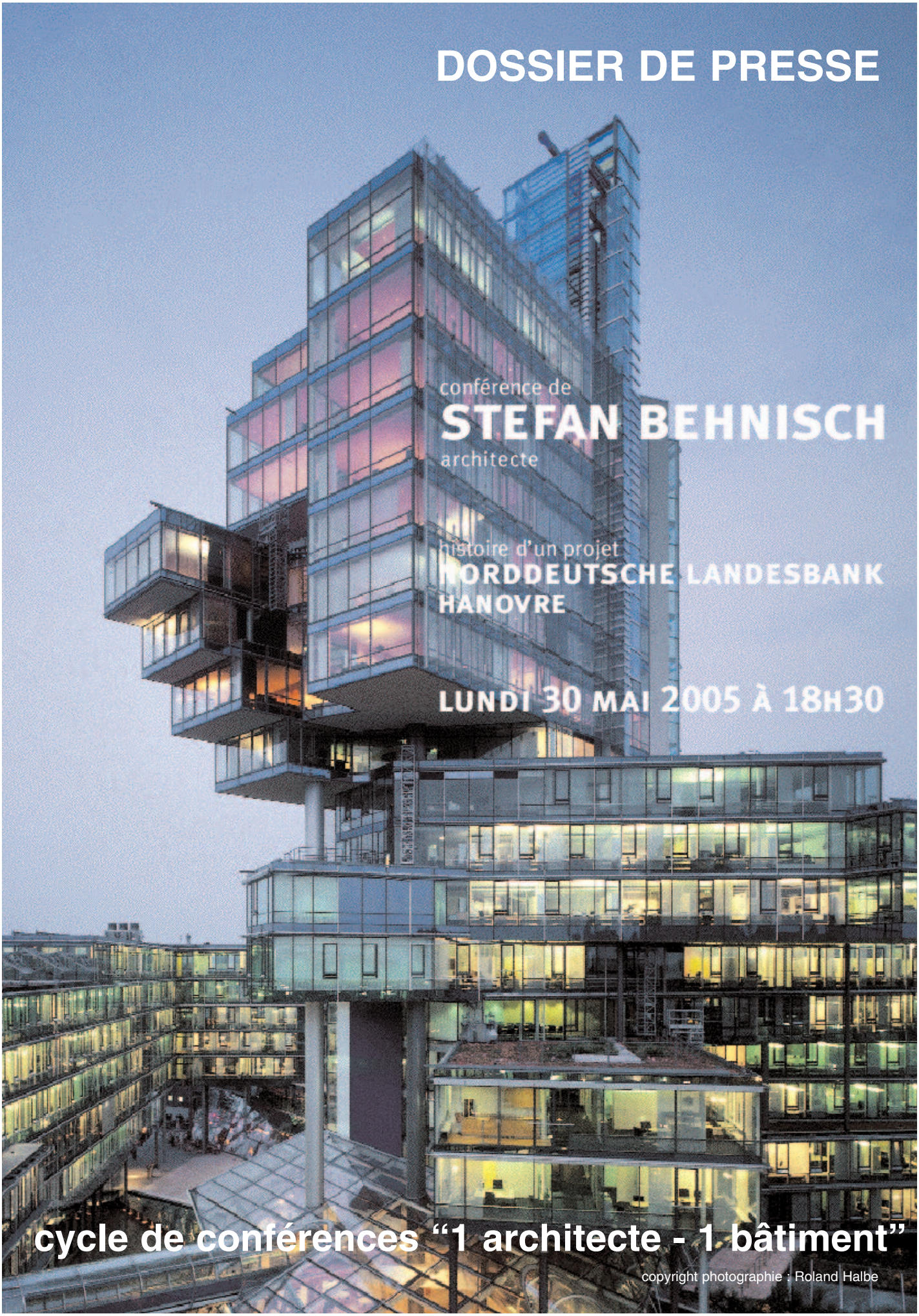
DOSSIER DE PRESSE



conférence de

STEFAN BEHNISCH

architecte

histoire d'un projet

NORDDEUTSCHE LANDESBANK HANOVRE

LUNDI 30 MAI 2005 À 18H30

cycle de conférences "1 architecte - 1 bâtiment"

sommaire

Cycle de conférences
«1 architecte, 1 bâtiment»

"histoire d'un projet - commande - contraintes
construction - maîtrise d'ouvrage - métier d'architecte
règlements..."

Nous avons souhaité lancer en l'an 2000, un cycle intitulé, « 1 architecte - 1 bâtiment » au cours duquel des architectes reconnus sont venus et viendront au Pavillon de l'Arsenal évoquer l'histoire d'un de leurs projets réalisé en France ou ailleurs.

Ce cycle de conférence doit permettre au grand public de comprendre comment se fait l'architecture et de lui faire découvrir le métier d'architecte à travers l'histoire d'un projet.

Les maîtres d'œuvre invités, français ou étrangers, présenteront chronologiquement toute l'histoire d'un de leurs projets, de la commande jusqu'à sa réalisation et à son appropriation par l'utilisateur.

Ces conférences permettent de mieux appréhender les contraintes rencontrées par les maîtres d'œuvre, de découvrir les liens tissés avec le maître d'ouvrage et les différents intervenants, de connaître les réflexions des architectes sur la comande et sur les règlements qui varient selon les villes, selon les pays.

Régulièrement d'autres architectes viendront ainsi nous parler, de projets, d'échelles et de programmes différents.

Behnisch, Behnisch & Partner

Behnisch, Behnisch & Partner was established in 1989. Originally founded as a branch office of Behnisch & Partner, it has functioned independently since 1991 and realised a series of projects both in Germany and abroad, and won numerous awards. The range of projects involved extends from office buildings to swimming halls and from schools to museums. The most widely published buildings are the Institute for Forestry and Nature Research in Wageningen, NL, an ecological pilot project which was awarded. among others, the Trophée Sommet de la Terre et Bâtiment, the Genzyme Center in Cambridge, MA, and the Norddeutsche Landesbank in Hannover. In 1999, a branch office was established in Venice, California, to support the firm's activities in the North American market.

During the planning process, we architects are tied closely in an interplay with numerous disciplines. Especially at the start, we are dependent upon positive, substantive collaboration among all the disciplines involved. There are those — not only among architects, but also among engineers, consultants and advisors, who want to contribute to something special, and who are interested in innovation. For all of us, it may well be that precisely those aspects of our work that transcend concerns with earning a livelihood are the most interesting, the most fraught with risk, but also the most rewarding.

The creative process can be divided, very approximately, into three phases. The first is that of free ideas and concepts. Often founded heuristically on a variety of points of departure, the results of this phase must be sustaining and cultivated. They are sensitive, and require a positive environment in which to develop. In the second phase, an idea is measured against reality and tested. Often, it is discarded, and the process must begin all over again. In the third phase, finally, the successful idea is implemented.

The stronger the initial idea or conception, the better the chances it will survive the cold world of practical realisation undiminished. It is mainly the first two phases of the creative process that determine whether anything viable will emerge or not.

Many aspects contribute to the development of architecture; many disciplines work in concert, represented by the various parties who together plan a given project. There are the strong aspects, which, already by virtue of their position in our culture, can take care of themselves. As a rule, these occupy the realm of the quantitative, the simple facts of the case; they are readily measurable. They, too, form a component of architecture, albeit one of very many. However, because they are easily graspable, mathematically verifiable, those representing them always seem to have the "truth" on their side. Costs, deadlines, legal conditions, surfaces, volumes, absolute temperatures in the definition of so-called comfort are such "truths." These disciplines, ultimately, have limited bearing on the cultural value
of a building. These aspects play a far-reaching role in the planning process, but once a project has been completed, they recede to insignificance.

The task of architects must be to reinforce precisely those forces which cannot stand up for themselves, those failing to correspond to the social “mainstream.” The cultivation of such forces is generally regarded as an optional exercise, not a duty. Hardly graspable in quantitative terms, they are those quickly sacrificed in value engineering sessions. And yet it is just these “soft” aspects that constitute the rank and significance of a work of architecture.

An additional perspective should be kept in view. Ever since sustainability became foreshortened as a quantifiable term in public consciousness, i.e., reduced purely to measurements of energy use, it has become fashionable, achieving wide recognition as a discipline. The many facts and more subtle aspects of sustainability, for example the unity of nature and the human being, or the long overdue redefinition of “comfort,” are essentially lost in the shuffle. Here too, the prevalent orientation is apparently exclusively to the quantifiable. It is important to counter this development.

Behnisch, Behnisch & Partner

Norddeutsche Landesbank am Friedrichswall

Hanover, Germany

As a result of first prize in a 1996 design competition Behnisch, Behnisch & Partner were awarded the commission for the new administrative headquarters for the Norddeutsche Landesbank in Hanover. The new building lies between the old city centre to the north and turn-of-last-century residential districts to the south and occupies an entire city block.

In accordance with urban-planning guidelines the 4 to 7 storey, shallow-plan perimeter block building is aligned with the existing streets. From the exterior it resembles the traditional city block, as such complementing both the pattern and scale of its surroundings. At its centre, protected from the noise of the heavily trafficked streets, lies the heart of the complex, a large, new public courtyard framed by the perimeter building.

Characterized, but not dominated by the daily operations of the bank itself, the courtyard is enlivened by large reflecting pools, public art, paths, terraces and extensive planting of the various roof gardens. The organization of the building is such that the main entrance foyer, exhibition spaces, shops and public restaurants surround this court ensuring that the public domain extends across the site, that the streetscape benefits and that the building truly contributes to city life. The administration facilities begin on the first floor and are reached from the entrance hall via a generous stair and numerous lifts. From this central point glass-covered bridges, openable during the summer months, connect to the various parts of the complex.

At the north-eastern corner of the complex, the distinct high-rise structure develops out of the perimeter block as it turns inwards towards the centre of the courtyard. The high-rise part of the building accommodates lounges, conference facilities, restaurants and executive offices, reaching a height of nearly eighty metres. Rather than referring stylistically to the immediate surroundings, this structure responds to the historical downtown geometries instead of the orthogonal grid of the town planning post-war city. The freely developed sculptural form has become a new landmark, complementing both the neighbouring tower of the city hall and the city skyline.

A nearly 20m high steel-glass construction on top of the building including special panes with a metal coating produces interesting effects in yellow and blue. These effects vary as the position of the sun changes. At night this structure is lit by diodes.

The blocks addressing the streets were planned in such a way that economically efficient office layouts can be realised. The various building parts provide for different office depths, so that all common office types (open plan, individual, cellular, combined, team office, two rows and three rows of offices) can be realised.

Great attention has been paid to creating a pleasant and light working atmosphere. Most of the partitions consist of a cupboard system with sliding doors which has been specifically developed for this building. This system is very flexible and can be removed whenever necessary. Tea kitchens and other communicative areas introduce a certain rhythm to the office floors.

Although the building complex is very large, diversification into a variety of individual yet related elements ensures a human scale in a working environment for some 1,500 people.

Client: Norddeutsche Landesbank, Hannover
Competition: 1996
Completion: 2002

Energy Concept: Transsolar, Stuttgart, Germany
Structural: ARGE Tragwerksplanung Wetzel & v. Seht / Pfefferkorn & Partner
Landscaping: Behnisch, Behnisch & Partner with Nagel & Schonhoff, Hanover, Germany

Energy Strategy

The energy strategy implemented in the Norddeutsche Landesbank focuses on the use of natural resources such as sun, wind, outdoor air and low soil temperatures, making air conditioning almost completely redundant.

Due to the optimisation of daylight in the offices the use of artificial lighting can be considerably reduced. All rooms can be ventilated naturally by simply opening the windows, a means of exploiting the cooling potential of the outdoor air which exceeds 22°C during less than five per cent of the year.

By introducing the “clean” air of the courtyard into the void of the double façade it is possible to achieve window ventilation at those sides of the building exposed to the traffic of the surrounding streets. An air gap between the perimeter block and the retail units below serves as a supply channel between the courtyard and the double façade. Water features in the interior courtyard have a positive influence on the micro-climate and help prevent overheating of ground surfaces in summer.

The natural ventilation system is complemented by air vents within the walls to corridors, whilst respecting the necessary acoustical separation requirements. By exploiting the chimney effect in a series of shafts also integrated within the corridor walls, the used indoor air is exhausted at roof level.

The performance of the sun-shading installations and the glazing have been determined on the basis of computer-assisted shading studies. The sun-shading system is designed in such a way that whilst protecting against sunlight the paradox situation of over-darkening and the necessity for use of artificial lighting is avoided. The upper-most slats are angled independently of the rest so that daylight is re-directed to the reflective ceiling.

During the summer months the cooling potential of the outdoor air may not be sufficient. In this case active cooling of the offices is provided by direct cooling of the superstructure. This is achieved by directing water with a temperature of 18°C through a system of polyethylene pipework integrated in the concrete floor slabs. During normal summer days it is sufficient to “flush” the solid concrete slab at night with the stored coolness gradually released into the rooms during the course of the day.

The 18°C cooling water is provided during the night only, by a small cooling tower. A traditional cooling plant is not necessary. During extremely warm summer days the slabs are actively cooled with circulated cold water also during the daytime. In this case the cold water is provided by a ground heat exchanger connected to the foundation piles below the high-rise.

The geo-thermal energy is used in two ways: the heat absorbed by the ground in summer is stored until the winter months when the superstructure integrated pipework is used as a low temperature heating installation. For this purpose water with a temperature of 6°C circulates through the ground heat exchangers, a heat pump then raises the water temperature to approx. 30°C, because of the low temperature increase the heat pump is highly efficient.

In summer the operations of the system are reversed: the heat from the offices is directed into the ground via the superstructure. The circulating water, which has a temperature of around 25°C, is cooled by the ground heat exchangers and again made available for cooling of the slabs. Only the circulation pump requires electric power, expensive high-quality energy. The annual energy balance for the heat introduced and extracted to/from the ground is even.

No photovoltaic systems have been incorporated in the building because their energy-saving potential is relatively minimal. Hot water for the kitchen to the staff restaurant is produced by a small field of solar collectors mounted on the flat roof to the perimeter block.

From the 8th floor upwards the rooms of the high-rise are equipped with mechanical ventilation plant and cooling panels within the suspended ceilings as, due to the high loads in the superstructure, it proved impossible to integrate the necessary pipework into the floor slabs.

Behnisch, Behnisch & Partner

D.R.

D.R.

D.R.

D.R.

Projects

Behnisch, Behnisch & Partner

Behnisch, Behnisch & Partner are an internationally renowned practice offering a comprehensive range of design and planning services. Working globally and in all fields - educational, institutional, commercial and leisure - in both private and public sectors, the practice has completed price-winning projects at all scales, a number of which have become recognised as both cultural and architectural landmarks.

Due consideration for the protection of the environment is a major objective in the practice's work. In all cases we question the necessity for, or indeed the dependency upon mechanical systems. Our buildings are increasingly characterised by a variety of 'passive measures' adopted as we attempt to avoid sophisticated technologies and make sensible use of the available resources.

D.R.

The Institute for Forestry and Nature Research in Wageningen, the Netherlands (completed in 1998), for which Stefan Behnisch was awarded the "Prix Sommet de la terre et bâtiment" en 2002, was the firm's first truly sustainable building. Briefed to be a pilot project both in ecological terms as well as in terms of being a human-friendly building, it was designed as an E-shaped house with two glazed atria between the offices in the three "fingers". These atria are a central element of the climatic concept, acting both as heat buffers and shading elements, while providing a pleasant environment for both work and leisure in the midst of extensively planted gardens.

D.R.

The Norddeutsche Landesbank in Hannover, which was completed in 2002, was the firm's first high-rise. It occupies an entire city block, serving as a linking element between various city quarters. The organisation of the building is such that the main entrance foyer, exhibition spaces, shops and public restaurants surrounding an interior courtyard ensure that the public domain extends across the site, that the streetscape benefits and that the building truly contributes to city life.

The Genzyme Center in Cambridge, MA, USA (2004) is the firm's first project in the United States. This building on a former brownfield site in the midst of other dynamic research institutions has been designed as a special symbol for progress and represents a point of identification for both employees and visitors. High quality workspaces are to be offered to facilitate the recruitment and retention of a highly educated and keenly sought after workforce.

The goal of this design was to develop a building from the inside out, from the individual working environment to its overall complex structure. In its centre a climatic oasis has been developed - an atrium, which extends over the full height of the 12-storey building, branching like a tree and creating spatial situations with various private and public identities.

D.R.

Other recent projects by Behnisch, Behnisch & Partner are the Museum of Fantasy in Bernried on Starnberger See near Munich (2001), and the masterplan for Sports Campus Ireland, which was delivered in 2002.
Right now the practice has projects in Switzerland, Italy, Latvia, Canada, Russia, Las Vegas, and, of course, Germany, on its drawing boards.

Behnisch, Behnisch & Partner

STEFAN BEHNISCH

D.R.

Born 1957	Stuttgart
Since 1991	Married to Petra Behnisch (née Fries), two sons
1964 - 1976	Freie Waldorfschule in Stuttgart
1976 - 1979	Studies in Philosophy, Philosophische Hochschule der Jesuiten, Munich
1978	Bakkalaureus Artius of Philosophy
1977 - 1979	Studies in Economics, Ludwig Maximilians University, Munich
1979 - 1987	Studies in Architecture, University of Karlsruhe
1984 - 1985	Works at Stephen Woolley & Associates Architects in Venice, California/USA
Since 1987	with Behnisch & Partner
Since 1989	Founding and management Behnisch, Behnisch & Partner
1999	Foundation of Branch Office in Los Angeles/USA Behnisch, Behnisch & Partner LA Office Design and Planning
1987 - 1989	Visiting Lecturer, University of Stuttgart
1997-2001	External Examiner, University of Portsmouth,UK
1998	External Examiner, Bergen Architecture School, Norway
2001	Guest Professor at the University of Texas, Austin, Texas, USA
2005	Yale University School of Architecture, New Haven, USA Eero Saarinen Chair 2005
Since 1993	Workshops, lectures, conferences at universities, research institutes etc. in all parts of the world
Since 2003	Member of the BDA (Association of German Architects), Board member of CIMA
Since 2004	Member of the RIBA

cycle de conférences « 1 architecte, 1 bâtiment »

rappel des conférences précédentes, disponibles au Salon Vidéo du Pavillon de l'Arsenal

Massimiliano Fuksas, Italie, Maison des Arts de Bordeaux

Christian de Portzamparc, Tour LVMH, New York,

Dominique Perrault , Piscine et le Vélodrome Olympiques , Berlin

Architecture Studio, Parlement Européen, Strasbourg

Patrick Berger, Siège de l'UEFA, Nyon, Suisse

Bernard Tschumi, École d'Architecture de la Ville et des Territoires, Marne-la Vallée

Henri Ciriani, maison privée, Pérou

William Alsop, U.K., Bibliothèque de Peckham, Londres

Willem Jan Neuteling, Hollande, Bâtiment Minnaert, Université d'Utrecht, Pays-Bas

Manuel Gausa, Actar Arquitectura, Espagne, M'House, des logements à la carte, Nantes

Félix Claus, Agence Claus en Kaan Architekten, Hollande, Cimetière Zorgvlied, Amsterdam

Annette Gigon, Agence Gigon/Guyer, Suisse, Musée Liner, Appenzel

Joao Luis Carrilho Da Graca, Portugal, Pavillon de la Connaissance des Mers, Lisbonne

Alfredo Paya Benedito, Espagne, Musée de l'université San Vincente del Raspeig, Alicante

Carlos Ferrater, Espagne, Hôtel, Palais de Catalogne, Fitness Center, Barcelone

Mark Goulthorpe, dECOi architect(e)s, U.K., façade de l'Opéra, Birmingham

Xaveer de Geyter, Belgique, Maison à Brasschaat, Antwerp

Francis Soler, Immeuble de logements, Clichy

Nicolas Michelin, LABFAC, Maison des Services Publics, Montfermeil

Louisa Hutton, sauerbruch hutton architectes, siège social GSW, Berlin

Shigeru Ban, Japon, Pavillon du Japon, Hanovre 2000

Dominique Lyon, « Les Tilleuls » 55 logements P.L.A., Gagny

Marc Mimram, La Passerelle Solférino et le Passage des Tuileries

Anne Lacaton et Jean-Philippe Vassal, site de créations contemporaines, Palais de Tokyo, Paris

François Roche, R&Sie... , maison Barak, Sommières, France

David Trottin et Louis Paillard, PÉRIPHÉRIQUES, maison MR et maison icône

Isabel Hérault et Yves Arnod, la patinoire "Pole Sud" de Grenoble

Rémy Marciano, le gymnase Ruffi, Marseille

Jacques Moussafir, UFR Arts PARIS 8, St-Denis

Philippe Barthélémy et Silvia Grino, Kowa Building, Kobé - Japon

Daniel Libeskind, World Trade Center, New York

Peter Stutchbury, Bay House, Sydney

NOX Architects, Lars Spuybroek, Maison Folie, Lille

Hans-Walter Müller, Volume Chaillot II, architectures gonflables

Massimiliano Fuksas, The new Milan Trade Fair

Antoinette Robain et Claire Guieysse, Centre national de la Danse, Pantin

Jean-Marc Ibos et Myrto Vitart, Maison des adolescents, Paris - Caserne des Sapeurs-Pompiers, Nanterre

Toyo Ito, Tod's Omotesando, Tokyo