AN INTRODUCTION TO URBAN BY NATURE—
The sixth edition of the **INTERNATIONAL ARCHITECTURE BIENNALE ROTTERDAM** opens in May 2014 in the Kunsthal in Rotterdam. The Dutch landscape architect Dirk Sijmons is the curator and the theme is *Urban by Nature*.

**IABR–2014–URBAN BY NATURE** claims that we can only resolve the environmental problems of the world if we resolve the problems of the city. Looking through the lens of landscape architecture, **IABR–2014** aims to redefine the city and urbanity, to analyze the relationship between city and nature, and from this to present concrete design proposals that allow for a better planning and governing of our complex urban landscape. If we see the city as our natural ecology, analyze its structure and metabolism, and understand and use the process of its material flows, we can make the city more resilient and thus act to contribute to a more sustainable future world.
A powerful idea or an image can radically, suddenly, alter your view of the world from one day to the next. You realize that you can never go back to the blissful unawareness that was so normal only a day before. This happened to me a few years ago, unexpectedly, when geologists announced the new era of the Anthropocene. Geologists are not usually scientists who deal with the short term and fast-paced upheavals. They think in thousands, if not millions of years. The most recent geological era, the Holocene, is now 10,000 years old. Breaking news rarely comes out of geology. But this time it did.

One evening I was reading an article about the Dutch Nobel prizewinner Paul Crutzen. He was relating how, as a matter of routine, he was speaking of the Holocene as ‘our’ era and suddenly realized: no, too much has changed in the last few centuries; we have since left the good old Holocene behind and entered a new age, in which humanity is affecting the earth like a force of nature. He named it ‘the era of the human being,’ the Anthropocene. When the alarm went off the next morning, I knew I was waking up in a new period. Not because the world had changed, but because my view of the world had been irrevocably altered.

Anthropocene is an apt and provocative term with which to describe the age and the world in which we now live. Thanks to this concept we can better place many observations about human influence on natural processes.

Around the world there are more trees in parks, nurseries and other human settings than in the primeval forest –

Around the world there are more trees in parks, nurseries and other human settings than in the primeval forest. Humans are capable, in 500 years, of burning up the biomass produced in 500 million years, and of altering the climate with the greenhouse gases released. A single project for tar sand extraction requires as much soil displacement as the sediment carried off by all the rivers in the world. This sediment movement, incidentally, has declined spectacularly as a result of the construction of tens
of thousands of dams, so that many densely populated delta areas around the world are no longer replenished naturally. The advance of humanity is coupled with an avalanche of species facing extinction. In short, the introduction of the concept of the Anthropocene is science at its most adventurous: a big, new, hypothetical word that suddenly organizes this disordered mess of phenomena and makes it understandable.

But Anthropocene is not just a scientific and observational concept. It resonates with a warning: the fact that we are powerful enough to manipulate the earth is not something to be proud of. The moral subtext is that we are also responsible for the consequences of our intervention: for environmental problems, for the extinction of species, for the Russian roulette of climate change. The introduction of the term has seriously undermined the excuse that we are too insignificant to do anything about it, and this lends Anthropocene a polemical, exhorting and even furious undertone.

And in this I see reasons for optimism. One of these is human ingenuity. This often gets us into trouble, but it also enables us to get us out of it. As The Economist wrote: ‘A planet that could soon be supporting as many as 10 billion human beings has to work differently from the one that held 1 billion people, mostly peasants, 200 years ago. The challenge of the Anthropocene is to use human ingenuity to set things up so that the planet can accomplish its 21st-century task.’

I am also optimistic because of one of the side effects of the concept of the Anthropocene. Seeing human intervention as a force of nature that affects the earth has undermined the pseudo-opposition between ‘nature’ and ‘human society.’
This opposition (like that between body and mind) has dominated thinking, blinded us and hampered effective action for centuries. We humans thought that we existed outside nature, and nature outside us. Nature was seen as the domain on the other side of the fence, where we could draw unlimited resources and dump waste forever.

– PERHAPS WE HUMANS ARE ‘BY NATURE’ INCLINED TO LIVE TOGETHER IN EXPANDING SETTLEMENTS – PERHAPS WE ARE URBAN BY NATURE –

Since the declaration of the Anthropocene, we no longer have to maintain the fiction of a division between what is natural and what is artificial. We can face the fact that they are closely intertwined. We can also acknowledge that many of the processes around us are in fact hybrids: combinations in which both ‘natural’ and ‘human’ forces are at work. What we have hitherto dubbed ‘natural’ is also artificial, and what we used to call ‘artificial’ is also natural. This applies to land use, river and ocean currents, flora and fauna, to the climate, and it also applies to one of the biggest and most visible hybrid forms on earth: the urban landscape. The simplistic arrangement of the past, in which we had placed city and nature in opposition to each other so that they excluded each other, is no longer valid. Perhaps we humans are ‘by nature’ inclined to live together in expanding settlements – perhaps we are urban by nature. That insight liberates us from a lot of moralistic brooding about ‘good’ and ‘bad’ in the relationship between nature and city.

In the Anthropocene we realize that city and nature overlap spatially and impact each other functionally. For spatial designers this is a unique challenging situation. What opportunities do these new hybrid forms present for organizing the urban landscape in an appealing and livable way? What new terminology can we use to discuss the city in the Anthropocene? What are the prospects for action for planners, nature conservationists, landscape architects, and urban designers?

I am intensely curious about the answers to these questions that we want to address in the IABR-2014—. Farewell Holocene, we’re moving on. New adventures ahead!

–Dirk Sijmons, March 2013
All over the world, urbanization is undergoing an awe-inspiring expansion surge. Already half of the world’s population lives in what we call the city, and in the next 40 years more than 3 billion people will be added to that figure. But what do we mean by ‘the city’? And how can we prepare our cities for another doubling of their present size?

What is certain is that in the future we cannot continue to expand cities the way we have in the past. An unprecedented effort is required to accommodate the urban population of 2050 in a consistently livable way. It requires uncommon political courage and financial wizardry – hundreds of billions of euros will be spent in investments worldwide, and the way these will be spent can make the difference between a sustainable perspective and a catastrophe. It also requires new ideas, new knowledge, new models, new technologies, new forms of organization and ways of working, and a new urban policy. The world urgently needs a plan for its urban future.

The **INTERNATIONAL ARCHITECTURE BIENNALE ROTTERDAM (IABR)** examines the worldwide urbanization challenge from a different perspective every two years. This is done based on the conviction that spatial design – the work of architects, urban designers and landscape architects – is of crucial public importance. The **IABR** brings these professionals together, along with scientists and other experts, administrators, businesses and stakeholders, it provides them with a platform and gets a broader audience involved.

During the sixth edition, **IABR–2014–**, this will take place under the motto ‘Urban by Nature’ with landscape architect Dirk Sijmons as curator. The line of approach is the fundamentally shifting relationship
between society and nature, based on the conviction that its understanding will not only alter our idea of what the city is, but can also work to our advantage in addressing the worldwide urban issues of the twenty-first century.

THERE IS NO SOMEWHERE ELSE ANYMORE

As human civilization becomes an increasingly urban civilization, the necessity to treat the crucial issues of the twenty-first century as urban issues also increases. This applies to complex problems such as energy transition, climate change, biodiversity, the depletion of natural resources, the way in which our society is organized and governed, but equally to the realization of each individual’s basic right to a dignified existence free of poverty and oppression. It applies to the elementary life questions that are as urgent for every individual human being as they are for humanity as a whole: How will 9 billion people, with 7 billion of them living in the city, be able to provide for their needs in drinking water, food, heat, security, shelter, work, personal encounters, rest and knowledge? Now that we know that these world problems have become urban problems, we also have to find the answers in the urban area – that is the premise of IABR–2014–. The city has to become efficient and resilient, made ready for these challenges.

THE URBAN SYSTEM HAS EXPANDED LIKE A NETWORK ACROSS VIRTUALLY ALL FERTILE PARTS OF THE EARTH –

In the past solutions were commonly sought outside the city. The city was compact, sharply demarcated and surrounded by pastoral countryside, where nature and farmland seemed inexhaustible resources for the functioning of the city. We supplied urban energy needs by importing fuels from beyond the horizon. The city’s waste problems were delegated to the area outside it. When the city became too small, we expanded it. In short, the city dealt with its problems with a forward flight, an escape to somewhere else.
This is less and less possible. The world’s population keeps growing, and the undiminished human drive toward prosperity and wealth is placing ever-greater pressure on the availability of space and resources. The urban system has expanded like a network across virtually all fertile parts of the earth. The satellite images of brightly lit, gargantuan urban landscapes at night speak volumes: there is less and less usable room to expand, less and less space to escape to the outside. The ‘somewhere else’ that used to exist in abundance as a reservoir of problem solutions, is disappearing, and we are being forced to bid farewell to traditional ‘somewhere-else planning.’ The human habitat increasingly corresponds to the urban landscape, and it is within it that we have to survive. There is no new frontier left.

During this forward flight we have succeeded in sweeping its direct and indirect effects under the carpet for a long time. Now they can no longer be ignored; they are becoming urgent issues, like climate change, the energy crisis, over-fishing, resource-scarcity and eroding biodiversity. The side effects of the worldwide urban project are climbing onto the podium and they themselves are now becoming the project. IABR–2014–URBAN BY NATURE– puts them in the spotlight and claims that these new protagonists present new opportunities for the urban landscape. We can cash in on these opportunities if we mobilize political will, if we are inventive and if we adapt and learn to make good use of affluence and ingenuity instead of wasting them.

To begin with we have to develop a new vision of the human habitat, now that it has become so urban: a vision of what this new city actually is and how it relates to nature and to our own nature. It is from this that IABR–2014– derives its motto.

URBAN BY NATURE–

IABR–2014– starts from a different idea about the relationship between urban society and nature. We look back at its rich history, in which, from the beginning of urbanization, natural elements and gardens have been part of the city. We see the affectionate and mediated
relationships between city and nature that led to gardens, urban arcadia, the establishment of parks and the idea of nature conservancy. We investigate how these rich sources of inspiration can inspire the making of the city today.

We do not set nature outside man and society; instead we examine our own nature in all its manifestations. For has the city not become our natural state, our habitat and our ecology all rolled up in one? We seem to be inclined to construct complex structures we call cities. Have humans perhaps become urban by nature?

The city as nature: that is the premise of IABR–2014–. We seek an analysis of an urban development that dispenses with pseudo-oppositions between ‘artifact’ and ‘nature,’ and reveals a range of surprising and productive overlap and even hybridization in the urban and the natural. The city is our largest artifact and our natural habitat at the same time. We see the technological and social forces that lend the city its dynamism as a continuation of evolution by other means. And this way of seeing things also offers us a new perspective for action.

THE METABOLISM OF THE CITY–
IABR–2014– views the city as a complex, sprawling and active system that is unceasingly working to provide for the needs of its occupants. We can describe this system not just in artificial, but also in organic terms. Just as a human body breathes, drinks, eats, uses its senses, and excretes waste, so can vital material flows be identified in the city. One of the key concepts of IABR–2014– is therefore the ‘metabolism’ of the city.

To make this metabolism visible, IABR–2014– is concentrating on several vital material flows: energy, fresh water, biomass and food, waste, sand and sediment,
information, transport of goods and people. These flows touch the everyday lives of individual city dwellers with their elementary necessities, and also the functioning of the great urban constellations as a whole. Each of them is indispensable for the functioning and the wellbeing of the city. But none of them will be guaranteed in the coming decades. In many instances it will be extremely difficult to maintain them at an adequate and sustainable level.

IABR–2014– is focusing on this enormous yet concretely conceivable challenge. Each material flow has its own infrastructure (electricity network, water network, Internet, etcetera). As designers we investigate how these infrastructures can be better designed, individually but also in cohesion with one another –as infrastructure with a capital I– and closely interwoven into the rest of the urban fabric.

Experience teaches us that the ‘spatial order,’ to a considerable degree, is influenced by the placement of the infrastructure. The design of the infrastructure can therefore be consciously used to steer major urban expansions. Whereas infrastructure construction and urban growth now often take place without coordination in practice, a more intelligent infrastructure planning will contribute to a better spatial order. And this would also improve the environmental performance of the city.

This is all the more important because the necessary investments in infrastructure due to growth and restructuring of cities around the world in the coming decades will cost many hundreds of billions. These enormous sums of money can be spent well or badly, ad hoc or sustainably, with a high or a low return; they can improve the environmental performance of the city or eventually lead to a catastrophe of the urban metabolism as a whole and for each city dweller in particular. How things turn out depends not on fate but on the right decisions, and above all on political will, relying on a new and effective arsenal of design solutions.

In the Netherlands too, infrastructure can be used more effectively than it is now. The urgent urban issues of the world seem remote. It is tempting to
think that they do not really affect us, and that the water from the tap, the food in the shops and the reception of our telephones will remain in place. Yet a great deal has to be done here to guarantee these provisions in the future as well. We cannot continue with our overconsumption when there is constantly more intense competition for constantly scarcer resources all over the world. Therefore we have to devote our full attention to smart design strategies, based on efficiency and synergy, for the material flows and their infrastructure. We can learn a great deal from the policies and the plans devised for these material flows elsewhere in the world.

The metabolism of the city has a technical dimension: How does it work, how is it structured, what can you do, and how do you do it? It also has a social and moral dimension: What does it work toward, what life does it make possible, how do the elements of the whole interrelate, in what social and political context does it exist? It also has a design dimension: In what form can we best apply the characteristics and possibilities of the material flows to urban life? IABR–2014– operates from the design dimension, and from this makes a connection to technology and society. An infrastructure informed by knowledge and analysis of the material flows is a formidable planning instrument for the boundless cities of the twenty-first century.

THE MEASURE OF THE CITY
In order to understand the fundamentally shifting relationship between society and nature, the correct choice of scale is crucial. IABR–2014– focuses on the urban domain in the broad sense: complex, diverse, and often immensely sprawling. This city, or to put it a better way this urban landscape, is a variegated mosaic, spread out far and wide with many forms of
land use at high and low densities. Identifiable old city cores and new residential areas are part of this, but also farmland, forests, mountains, lakes, strip mines, industrial areas, greenhouses, harbors, recreational villages, zones without clear organization, and a maze of different kinds of infrastructure. How best to label this sprawling metropolis is a question in itself. We find ‘carpet metropolis’ (a term coined by Willem-Jan Neutelings) an appealing and usable characterization.

Naturally, some of the challenges we face can be addressed at a local scale, while others require a global scale. But in between lies a vast and promising work arena on the scale of the actual, existing carpet metropolis. IABR–2014– is looking at the city at this scale, at its complex spatial configuration, at nature, and at its metabolism, because we believe that it is at this scale that significant solutions can be found for the challenges of the twenty-first century.

In its own part of the world IABR–2014– is studying the city at the scale of the ABC metropolis, named after its vertices: Amsterdam, Brussels and Cologne. The carpet of this metropolis stretches across hundreds of kilometers, hung loosely across national borders. Rotterdam, Antwerp and Liège are part of it, as is the area of the great rivers, Brabant, Limburg and Wallonia. About 31 million people inhabit it, and the great diversity within the area makes it ideally suited to demonstrate the theme in the field.

**LANDSCAPE ARCHITECTURE AS A LENS**

In working on the theme Urban by Nature, landscape architecture is acting as a guide in a hybridizing world. ‘Landscape’ is by definition an ambiguous and connecting concept, in which ‘natural factors’ and ‘human actions’ come together. A landscape architect is trained not to look at an area as natural or artificial, but as both at the same time, as two images that slide on top of one another and together tell a more complete story.

Looking at complex urban systems like this is of course nothing new; we are able to build on a stream of innovative thinking that has existed as long as the
expanding city itself. In view of the current extent, speed and intensity of the issues, however, innovation in thinking and working is once again required. That is the intention of IABR–2014-. Looking through the lens of landscape architecture, we are radicalizing the idea of the city, the urban condition, society, and nature. On this basis, we want to make design proposals and demonstrate best practices for a better management of our complex urban landscape.

- LOOKING THROUGH THE LENS OF LANDSCAPE ARCHITECTURE, WE ARE RADICALIZING THE IDEA OF THE CITY, THE URBAN CONDITION, SOCIETY, AND NATURE -

RESEARCH: THREE IABR PROJECT ATELIERS

In order to conduct thorough research and develop design proposals that can be tested in practice, IABR–2014– has set up three Project Ateliers. In these, IABR–2014– is working with three local and regional governments in the Netherlands.

In these ateliers, designers from the Netherlands and abroad work on concrete and current local challenges. The existing challenges take a detour, as it were, along the Biennale, allowing a new, fresh, and free way to see them, to get experts from the Netherlands and beyond to contribute ideas, to collect best practices from elsewhere and to present both the challenge and the design proposals to stakeholders as well as to the public at large. In the end, after the exhibition, the results will find their way back into the local projects themselves.

Each Project Atelier is linked to one of the three sub-themes of IABR–2014–, which are the focus of the exhibition: ‘City and Nature’ (Project Atelier Texel), ‘The Metabolism of the City’ (Rotterdam Project Atelier Rotterdam), and ‘Strategies for the Urban Landscape’ (Project Atelier BrabantStad).
COLLABORATION: PARTNERS AND PEERS–
The realization of the PROJECT ATELIERS– and the
exhibition program of URBAN BY NATURE– will involve
close collaboration with private and public parties.
This collaboration will include input on content, alli-
ances related to the PROJECT ATELIERS–, and partner-
ships in the realization of the program.

Major partners of the IABR–2014– already include
the Netherlands Ministry of Infrastructure and the
Environment, the municipalities of Rotterdam and
Texel, the Province of North Brabant and the urban
network BrabantStad, the Creative Industries Fund
NL, the Kunsthall, the Rotterdam Natural History
Museum, the World Wide Fund for Nature, the PBL
Netherlands Environmental Assessment Agency,
the Netherlands Organization for Applied Scientific
Research (TNO), Delft University of Technology, the
Berlage, The New Institute, the Rotterdam Economic
Development Board, ETH Zurich, The Center for
Advanced Urbanism of the Massachusetts Institute
of Technology, and the Graduate School of Design at
Harvard University.

This network will expand over the coming year.

The curator, Dirk Sijmons, is seconded by an interna-
tional peer group composed of Jack Ahern (University
of Massachusetts, Amherst), Pierre Belanger (Harvard
Graduate School of Design), Alan Berger (MIT,
Cambridge), Kees Christiaanse (ETH Zurich), Lisa
Diedrich (Swedish University of Agricultural Sciences,
Alnarp), Christophe Girot (ETH Zurich), Maarten Hajer
(PBL Netherlands Environmental Assessment Agency),
Kristina Hill (University of California, Berkeley), Eric
de Jong (Artis Chair, University of Amsterdam), Lars
Lerup (Rice University, Houston), Arnold Reijndorp
(University of Amsterdam), Michiel Schwarz
(Amsterdam), Kelly Shannon (University of Oslo),
Jorg Sieweke (University of Virginia), Marc Swilling
(Stellenbosch University, SA) and Charles Waldheim
(Harvard Graduate School of Design).
THE EXHIBITION: URBAN BY NATURE–
The main exhibition, URBAN BY NATURE–, will be staged at the Kunsthal in Rotterdam starting at the end of May 2014. The adjacent Rotterdam Natural History Museum will present a related exhibition on urban ecology and the natural wealth and biodiversity in the urban landscape of Rotterdam.

In the main exhibition, designed by EventArchitectuur, IABR–2014’s narrative will unfold along a course running through the entire Kunsthal. The Kunsthal, which was designed by Rem Koolhaas almost as a landscape, lends itself admirably to such a narrative approach.

The argument of URBAN BY NATURE– is divided into three sub-themes, each of which fills its own hall.

The story begins with an introduction. The visitor then enters Hall 1: City and Nature, which looks out onto the Museumpark.

A giant backdrop along one of the long walls lays the evolution of ideas about the relationship between man and his environment along a historical line, and serves as an explanatory legend for the entire hall.

In Hall 1 the results of the IABR–PROJECT ATELIER TEXEL– are displayed. This island has played a historically significant role in the development of nature conservancy in the Netherlands, and even today offers a wonderful laboratory situation for innovations. The island, as ever, serves as a trenchant metaphor: If the conversion to a healthy metabolism does not succeed on this island, how can it succeed on ‘Island Earth’?

Here the mediated and symbolic relationships between city and nature are addressed. The visitor sees the, present and past of the garden, of urban Arcadia, of the park, and how to deal with these in the future, in the new, sprawling urban landscapes where the distinctions between culture and nature are blurring. Here also examples of how we can apply natural processes to shape our urban forms, how we can build with nature, are presented.

A specially designed exhibition made in close collaboration with the Dutch branch of the World Wildlife Fund raises questions about the future of nature conservancy in an urban age.
The visitor then enters the two-story Design Gallery. The transparent walking surface of the upper story provides an ideal opportunity to show ‘above’ and ‘below’ in relation to each other in a cross section of the earth. Projects from the Netherlands and abroad demonstrate that underground use of space is the new pioneering territory. So much activity is now taking place underground – with cables, conduits, thermal storage, CO₂ solutions, underground construction, and potential shale gas extraction – that planning is becoming increasingly imperative. There is also attention to the underground itself, that living world that is virtually unknown to most of us.

The idea that we can now also see the city as nature is made clear in Hall 2: The Metabolism of the City, where the focus is on urban metabolism. The city ‘lives’ not only from human flows, but also from flows of material, water, heat, energy, and information that are processed, assimilated, and valorized and that are secreted in the form of flows of goods and waste. Each flow is introduced in its own pavilion, the important issues are identified and possible design approaches for the future are presented.

This way of looking at the city is elaborated in the IABR–PROJECT ATELIER ROTTERDAM–. The atelier uses not only the city itself, but also the entire delta in which it is located as its area of study, in search of a set of instruments for the Circular City. A large projection displays the results of the design research. Best practices from the Netherlands and abroad show where Rotterdam (as a city and as the linchpin of the Southwest Delta) and the rest of the world stand.
Finally the visitor enters Hall 3: **Strategies for the Urban Landscape**, where the carpet metropolises of our time are introduced. Designers and planners demonstrate that it is possible to weave different patterns in seemingly infinite carpets of urbanization. In their concepts, functions like water, nature, and agriculture will also be a sustainable component of the urban landscape and its infrastructure. Here major carpet metropolises are represented cartographically and typologically, in combination with a photo exhibition that zooms in on these same metropolises, reestablishing the human dimension.

**– DESIGNERS AND PLANNERS DEMONSTRATE THAT IT IS POSSIBLE TO WEAVE DIFFERENT PATTERNS IN SEEMINGLY INFINITE CARPETS OF URBANIZATION–**

The results of the **IABR–PROJECT ATELIER BRABANTSTAD** are the focus here. This atelier tests two different strategies, predicated on condensing and diluting processes. The Brabant carpet is confronted and linked to design, occupancy strategies, and network analyses of other carpet metropolises with other geographical foundations and other planning contexts.

Directly connected to Hall 3 is the **Photo Gallery**. Here the results of the thematic studies carried out as part of **IABR–2014** are presented, including into the spatial development effects of the introduction of a radically decentralized tax on CO₂ emissions, the Carbon-Added Tax (CAT).

Back at the entrance the visitor may want to study the catalogue and browse through the extensive themed selection in the bookshop. Lectures, film screenings, and symposia will regularly be held in the Auditorium, organized by the **IABR** and its partners, all in the context of **IABR–2014–URBAN BY NATURE–**.
Since its inception in 2001 the INTERNATIONAL ARCHITECTURE BIENNALE ROTTERDAM (IABR) has been focusing on the future of the city, based on the realization that this is where 80 per cent of the world’s population will soon be living and more than 90 per cent of its wealth will be produced. This will have to be done in a sustainable way. The city already consumes more than 65 per cent of the world’s energy and accounts for 70 per cent of all CO₂ emissions. Our future cities must be robust and livable for everyone; we must find a proper balance between people, planet, and profit in the city.

With its fifth edition, MAKING CITY in 2012, the IABR concluded a trilogy of biennales in which urbanization and its consequences were explored and which outlined the position that the designing power of architecture can adopt.

The next two biennales will build on this and delve deeper into previously developed insights. The design of the future habitat of humanity and the finding of a sustainable balance between people, environment, and prosperity are the motivations for the program of the next two editions.

IABR–2014–URBAN BY NATURE– explores the relationship between spatial design and the ecological agenda. IABR–2016– will call attention to the relationship between spatial design and the (development of the) economy.

Cities will have to find the way to an efficient future together. This is why the IABR connects Rotterdam to the world, and the world to Rotterdam. The IABR is a solution-oriented platform in which many parties work together, with a solid position within an extensive...
(knowledge) network in the Netherlands and abroad. It generates ideas and produces exhibitions, conferences, films, books, lectures, and debates. The IABR also sets up long-term design and research projects, facilitates the exchange of knowledge and, as much as it can, actively works on (and participates in) the making of the city, primarily in the form of project ateliers: in Rotterdam and the rest of the Netherlands, but also in the rest of the world, such as in Istanbul and São Paulo.

This way of working requires constantly establishing new result-oriented alliances, as well as a local, regional, national, and international positioning within an extensive (knowledge) network.

The main sources of funding for the IABR are the Netherlands Ministry of Infrastructure and the Environment, the Creative Industries Fund NL, and the City of Rotterdam.

The collaboration with the Ministry of Infrastructure and the Environment is intensive. During the 5TH IABR, the IABR and the ministry joined in developing Atelier Making Projects, in which seven major spatial projects in the Netherlands were reexamined from the perspective of the theme of the 5TH IABR. This project was a success, and its approach has been made part of the Dutch government’s Action Agenda for Architecture and Spatial Design 2013–2016 (AAARO). The IABR is also a lead partner of the ministry in implementing the AAARO. In this role, it will set up three major project ateliers in parallel to each Biennale, in collaboration with local and regional governments in the Netherlands.

Rotterdam, the City of Architecture, is the IABR’s home as well as its base of operations. In collaboration with parties established here, such as the Creative Industries Fund NL, The New Institute, the AIR architecture center, the Rotterdam Academy of Architecture and Urban Design, the Deltametropool metropolitan development network, Delft University of Technology (Faculty of Architecture and Berlage), Erasmus University (MCD and IHS) and the
many design bureaus, often led by internationally renowned architects, the IABR forms an innovation-oriented infrastructure that is virtually unique in the world in terms of expertise in and knowledge of the city and urbanization. In addition to being one of the players, the IABR, every two years, is the international platform on which these parties as well as the city itself can manifest themselves.

Nationally the IABR works with many parties, sometimes in continuity, sometimes in connection with specific editions. For instance, Rijkswaterstaat (the Dutch public works and water management agency), NEPROM (the association of Dutch project developers) and the City of Amsterdam have previously been partners, as were the Delta Commission and the Municipalities of Almere, Eindhoven, The Hague, Oude IJsselstreek, and Groningen in 2012.

Internationally the IABR has worked, since its inception, with such learning institutions as the ETH Zurich, Columbia University, the University of Kentucky, the Universidade de São Paulo, Bilgi University Istanbul, the London School of Economics, the Harvard Graduate School of Design, and the Center for Advanced Urbanism at the Massachusetts Institute of Technology.

Last but not least, the IABR has established important partnerships with the cities of São Paulo and Istanbul, where Project Ateliers linked to existing local challenges have been organized in recent years. The results of these have found their way into implementation.

In this the IABR wants to contribute forcefully to the strengthening of the role of design in local and regional projects, in the Netherlands and abroad, both as an active partner and in its role as a national and international platform. This combination of knowledge exchange and research, public events and presentation, and result-oriented development, all as part of research into the future of the city, makes the IABR unique in the world.
Nest of feral pigeon (Columba livia domestica), made of (chicken)wire and (own) excrements; 13 February 1997, The Netherlands, Rotterdam-Botlek (Esso Refinery), NMR 9969-002470.
5TH IABR – MAKING CITY – (2012)

**INTERNATIONAL CURATOR TEAM**
Henk Ovink (Netherlands Ministry of Infrastructure and the Environment), Joachim Declerck (AWB, Brussels), Elma van Boxel and Kristian Koreman (ZUS, Rotterdam), Fernando de Mello Franco (MMBB, São Paulo), Asu Aksoy (Istanbul Bilgi University), under the chairmanship of George Brugmans (IABR)

**DIRECTOR**
George Brugmans

**8 exhibitions** in **four cities** in **three countries** and **51 events** (conferences, lectures, presentations, film showings, etc.), **133,500 visitors**, **1 cross-media project**, *The City Forever*, with VPRO over **2.8 million viewers and listeners**, locations: NAI, (in and around) Schieblock in Rotterdam, Belfort 13 in Almere, MCB São Paulo, Istanbul Modern Istanbul, **9 publications**, **1 documentary film**, (in coproduction with VPRO)

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4TH IABR – OPEN CITY: DESIGNING COEXISTENCE – (2009/10)

**CURATOR**
Kees Christiaanse (ETH Zurich/KCAP Rotterdam)

**DIRECTOR**
George Brugmans

**4 exhibitions** and **172 events** (conferences, lectures, presentations, film showings, etc.), **61,000 visitors**, **1 cross-media project**, *Urban Century*, with VPRO, **2.6 million viewers and listeners**, locations: Rotterdam: NAI, RDM Campus; Amsterdam: Tolhuistuin, Zuiderkerk, **4 publications**, **5 documentary films** (in coproduction with VPRO), *Open City World Tour 2010 - 2011*: travel exhibitions in Paris (Parallel Cases), The Hague, Istanbul, São Paulo MCB, São Paulo CEU Paraisópolis, Recife, Rio de Janeiro, New York, Amman, Cairo, Jakarta, Beirut, Berlin, Paris (Refuge), Denpasar, Batam, London, Milan, Baltimore
3RD IABR—POWER: PRODUCING THE CONTEMPORARY CITY— (2007)—
CURATOR
Berlage Institute
DIRECTOR
George Brugmans

4 exhibitions and conferences, lectures and other events, 77,500 visitors, locations: Kunsthal and NAI (Rotterdam), 3 publications, 1 documentary film (in coproduction with VPRO)

2ND IABR—THE FLOOD— (2005)
CURATOR
Adriaan Geuze (West8)
DIRECTOR
George Brugmans

5 exhibitions and conferences, lectures and other events, 57,000 visitors, locations: Las Palmas and NAI (Rotterdam), 5 publications, 1 documentary film (in coproduction with NOS)

1ST IABR—MOBILITY— (2003)
CURATOR AND DIRECTOR
Francine Houben (Mecanoo)

5 exhibitions and conferences, lectures and other events, 85,000 visitors, locations: Las Palmas and NAI (Rotterdam), 2 publications, 4 TV films (in coproduction with AVRO)
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