

FOR LEISURE ARCHITECTS, DESIGNERS, INVESTORS & DEVELOPERS

Daniel
Libeskind

Christoph
Ingenhoven

Marcel
Wanders

Enzo Enea

BIG
SPECIAL

starts p103

*Bjarke Ingels
photographed for CLAD
at the Lego House,
Billund, Denmark on
27 September 2017*

BJARKE INGELS

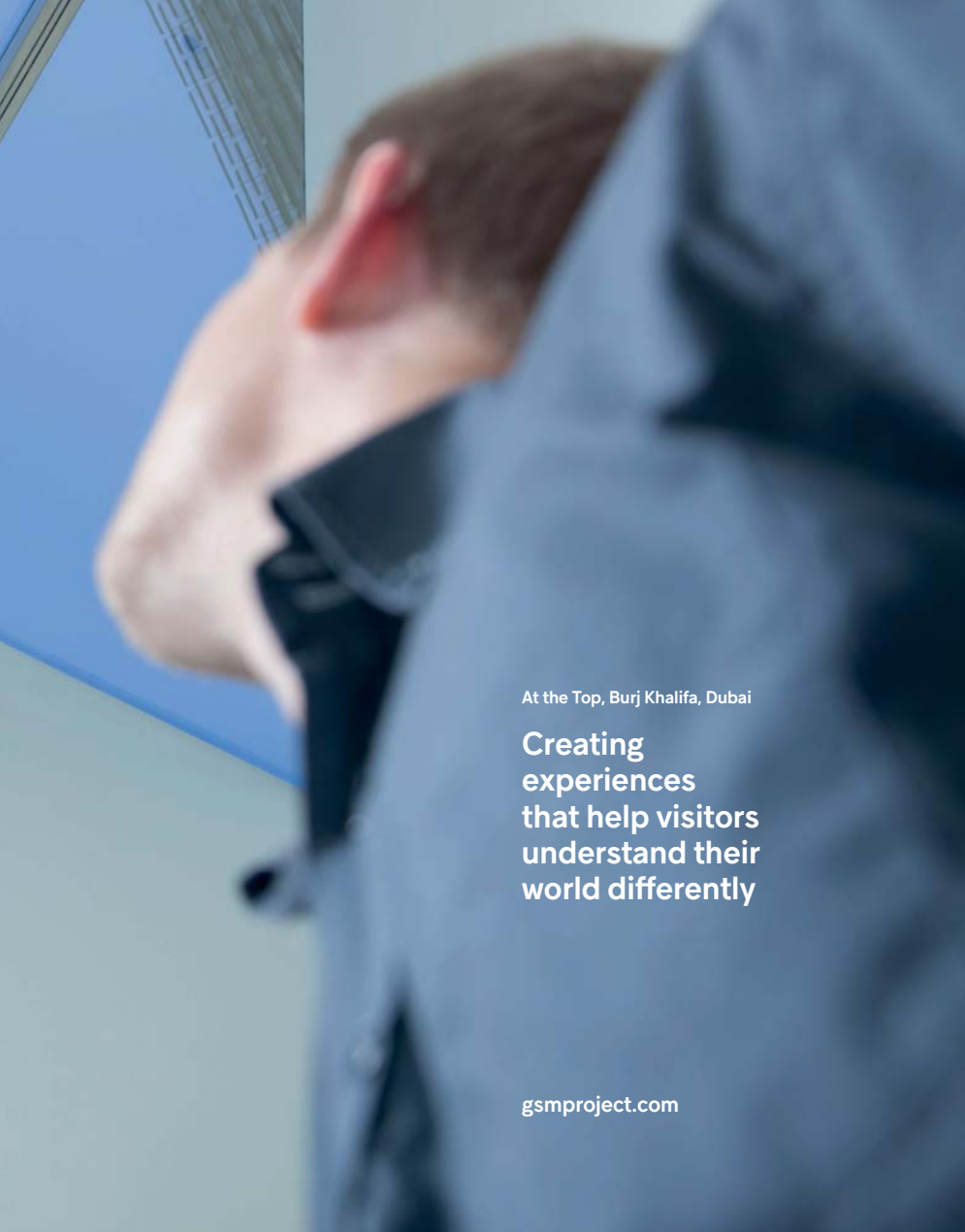
On life, Lego and how the BIG team is giving form to the future



Let's create
something
that changes
someone.

gsm°

Montréal / Dubai / Singapore



At the Top, Burj Khalifa, Dubai

**Creating
experiences
that help visitors
understand their
world differently**

gsmproject.com



ROBERT D. HENRY

Architecture + Interiors

■ Architectural Design ■ Space Planning ■ Interior Design ■ FF&E Selection ■ Brand Identity

info@rdh-architects.com www.rdh-architects.com



“Blockchain will revolutionise land and property ownership and unlock development opportunities”

Blockchain will drive a building boom

Property-based wealth is concentrated in countries with robust laws relating to the ownership of assets, making it impossible for investors to work in large parts of the world. However, that situation will start to change as land registries adopt Blockchain

Imagine buying property, then going out for the day and coming back to find someone else has moved in and there's absolutely nothing you can do about it.

Having the right and opportunity to own land and property is a privilege mainly taken for granted by those who have it. However, the World Bank estimates that 70 per cent of the global population lacks access to land or property titling, meaning they could 'buy' land or property, only to lose it to someone else, with no way to prove their claim.

This situation restricts opportunity, mobility and individual liberty – people have to literally stay on their land the whole time to defend their ownership – and it makes economic growth, inbound investment and real-estate development impossible.

Having a legal description of an asset and a watertight record of its ownership is a huge undertaking which is beyond the means of many governments in the third world.

But now government land registries are beginning to test Blockchain technology as a way of recording property transactions – a move which could herald an unprecedented disruption of the asset ownership industry.

Blockchain – the technology which underpins Bitcoin – creates a digital registry that can't be tampered with, permanently enshrining agreements. Putting transactions on a blockchain makes them almost impossible to forge.

The Swedish government's land registry, working with consultancy Kairos Future, is trailblazing by trialling Blockchain to record property transactions, saying the system will eliminate paperwork, speed up the registration process and reduce fraud.

Last month, an apartment in Kiev became the world's first property to be sold using a blockchain when Michael Arrington,

Investors will not only be able to make investments safely, but also there'll be a demand for the businesses they build

the Scottish founder of TechCrunch, used a US-based real-estate start-up called Propy to make the purchase using cryptocurrency.

These are early skirmishes with the technology, but as Blockchain comes on stream as an enabler of transactions and is adopted by governments, we'll see an acceleration of growth in countries that have been out of reach

to investors because there's been no way to operate in them. This will power the development of more wealthy economies, which will in turn create new markets, meaning investors will not only be able to make investments safely, but also that there will be a demand for the businesses that they build.

Liz Terry, editor, CLAD @elizterry



The Swedish land registry is trialling Blockchain

SCANNAL/SHUTTERSTOCK

BIG
SPECIAL

starts p103



PHOTO: PAUL MCCARTHY FOR INTERIORS

Bjarke Ingels introduces his team of BIGsters

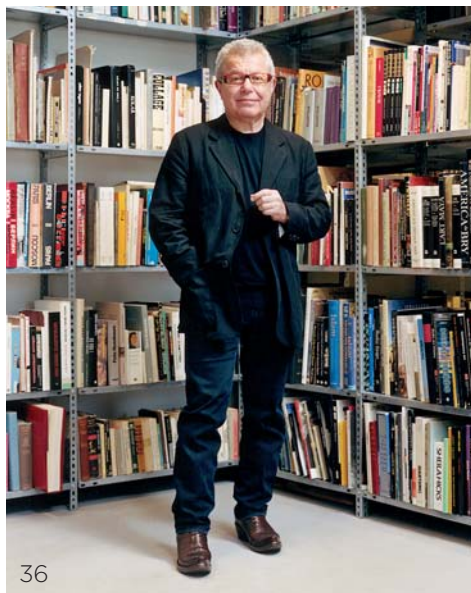


PHOTO: RYAN WATKINS FOR CLAD

Daniel Libeskind shares his plans

112

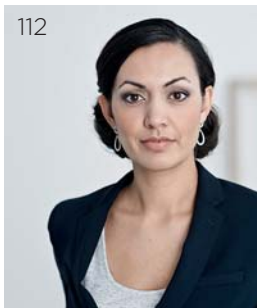


PHOTO: ANDREW WATKINS FOR CLAD

BIG CEO Sheela Maini Seggaard

5 Editor's letter

Blockchain will revolutionise the way we buy and sell land and property says Liz Terry

12 CLAD people

Manuelle Gautrand wins the 2017 European Prize, Antonio Cruz speaks out about Atletico Madrid's new stadium and Joyce Wang on her latest project

20 CLAD news

32 Burgenstock Resort

The famed Lake Lucerne hotel reopens following a €480m revamp

36 Daniel Libeskind

The Polish-American architect on how his buildings explore memory and identity

44 Christoph Ingenhoven

How Ingenhoven's experience as a guest informed the design of the Lanserhof medical spas

52 Enzo Enea

On saving trees, working with Zaha Hadid and changing the face of Miami

60 Living well

The US wellness communities providing a new model for living



52

Enzo Enea reflects on working with Zaha Hadid



66

Marcel Wanders talks about designing for major brands



74

PHOTO: © PIERRE COOR

PHOTO: JIM RALETTE

44



Christoph Ingenhoven on medical spa design

We explore how designers are transforming theatres

66 Marcel Wanders

The Dutch designer embraces chaos

74 Theatre design trends

The changing face of theatre design

80 Living for the moment

Celebrating ephemeral architecture

88 Flying high

Reviewing the Mercedes Benz Stadium

94 Astana Expo review

A look back at the best pavilions

128 CLADkit

Product design innovation



104 Bjarke Ingels

The BIG founder talks about Lego House, Mars Science City and the role of his team in BIG's success

112 Sheela Maini Søgaard

BIG's CEO reflects on the challenges of the firm's growth, and addressing the gender balance at the top

116 The BIG team

Meet the partners who've helped BIG to become a leading global practice

116 Finn Norkjaer

117 Thomas Christoffersen

118 Andreas Klok Pedersen

119 Kai-Uwe Bergmann

120 David Zahle

121 Jakob Lange

122 Daniel Sundlin

123 Beat Schenk

124 Brian Yang

125 Jakob Sand



CLAD

Community of Leisure Architects & Designers

About CLAD

The Community of Leisure Architects & Designers unites people who contribute to the success of leisure and the built environment, to enable them to do business. CLADglobal, the organisation behind CLAD, is a media business creating magazines, books, websites and digital feeds to enable CLAD professionals to share news, opinions and best practice. Find out more about the CLAD portfolio at CLADglobal.com

Leisure – a definition

CLAD's definition of leisure includes all aspects of out-of-home activity: arts & culture, museums & heritage, hotels & hospitality, bars & restaurants, sport & recreation, spa & wellness, health & fitness, attractions, theme parks & entertainment, greenspace, regeneration and retail. It's the biggest area of consumer expenditure in the developed world and the biggest driver of growth in the developing world.

CLADmag is published four times a year by The Leisure Media Co Ltd, Portmill House, Portmill Lane, Hitchin, Herts SG5 1DJ, UK. The views expressed in this publication are those of the author and do not necessarily represent those of the publisher The Leisure Media Co Ltd. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by means, electronic, mechanical, photocopying, recorded or otherwise, without the prior permission of the copyright holder, Cybertrek Ltd 2017. Printed by The Manson Group Limited. Distributed by Total Mail Ltd globally and Royal Mail Group Ltd and Whistl Ltd in the UK. ©Cybertrek Ltd 2017 ISSN print edition 2058-3338, online edition 2058-3346. To subscribe to CLADmag visit www.leisuresubs.com or email: subs@leisuremedia.com or call +44 1462 471930. Annual subscription rate is £100.

The CLADmag team



EDITOR

Liz Terry

+44 (0)1462 431385

lizterry@CLADglobal.com



MANAGING EDITOR

Magali Robathan

+44 (0)117 9723101

magalirobathan@CLADglobal.com



DEPUTY EDITOR

Kim Megson

+44 (0)1462 471915

kimmegson@CLADglobal.com



PUBLISHER

Julie Badrick

+44 (0)1462 471919

juliebadrick@CLADglobal.com

For email, use contact's
fullname@CLADglobal.com

SUBSCRIPTIONS

Denise Adams

+44 (0)1462 471930

www.leisuresubs.com

CIRCULATION

Michael Emmerson

+44 (0)1462 471932

NEWSDESK

Rob Gibson

+44 (0)1462 471902

Tom Anstey

+44 (0)1462 471916

Jane Kitchen

+44 (0)1462 471929

PRODUCT NEWS

Lauren Heath-Jones

+44 (0)1462 471927

ADVERTISING SALES

Jan Williams

+44 (0)1462 471909

John Challinor

+44 (0)1202 742968

Astrid Ros

+44 (0)1462 471911

CONTRIBUTORS

Alice Davis

+44 (0)1462 471918

Kathryn Hudson

Christopher DeWolf

Christian Lachel

WEB TEAM

Michael Paramore

+44 (0)1462 471926

Tim Nash

+44 (0)1462 471917

Emma Harris

+44 (0)1462 471921

Dean Fox

+44 (0)1462 471900

DESIGN

Andy Bundy

+44 (0)1462 471924

ADVERTISING & ARTWORK

Ed Gallagher

+44 (0)1905 20198

FINANCE

Denise Adams

+44 (0)1462 471930

CREDIT CONTROL

Rebekah Wilkinson

+44 (0)1462 733477



HEATED MARBLE LOUNGE CHAIRS *By Fabio Alemanno*

Developed for the spa Perfected for the suite

An exceptional collection of handcrafted marble sculptures for hotel, spa and residential design

Cut from a single block of flawless marble, Fabio Alemanno infra-red heated lounge chairs are ergonomically shaped and unique in their design and structure.

They combine wellness with design and technology offering unparalleled comfort and amazing relaxation experiences while enhancing the state of well-being.

Regenerative warmth will pamper you whether in the Spa, the intimacy of the Suite or the Living room, making your rest unforgettable.

With proven therapeutical benefits of long-wave infrared and advanced technical maturity, our products have become the first choice for discerning clients around the world.

Unlimited choices of marble, exotic wood, leather, and fabrics enable a perfect and seamless integration into any environment, offering architects and interior designers endless possibilities for customisation.



FABIO ALEMANNI DESIGN

● info@fa-design.co.uk ● www.fa-design.co.uk

Choose how you read CLADmag



PRINT

CLADmag is available in print on subscription. Sign up at leisuresubs.com



DIGITAL

Read CLADmag on Digital Turning Pages and enjoy extra links and searchability



PDF

The magazine is also available as a PDF edition for readers who want to read offline or on tablet



ONLINE

Read CLADmag online at CLADglobal.com and get access to the entire back catalogue



More from CLAD...

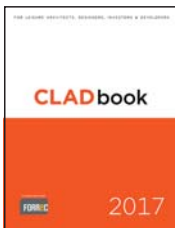
CLADmag

CLADmag is the glossy magazine which talks to the people making things happen in leisure architecture and design, investment and development. CLADmag uses storytelling and photography to bring the content alive. It's available on subscription in print and free of charge on Digital Turning Pages and PDF.



CLADbook

The annual CLADbook celebrates the best of CLAD. Contents include the CLAD Foresight™ trends report, Development Pipeline, Movers & Shakers, research and analysis. CLADbook is available in print, on Digital Turning Pages and as a PDF and is distributed to all CLADmag subscribers.



CLADweek

CLADweek is the news magazine for architects, designers, investors and developers working in the CLAD community. The magazine contains the latest news from CLAD with bonus photography to create a weekly review of the headlines. CLADweek is available on ezine, Digital Turning Pages, Flipboard and PDF.



CLADglobal.com

CLADglobal.com is updated around the clock with the latest news. From here you can access all CLAD's print and digital publications and news feeds free of charge and subscribe to print editions.

Go to the profile section to set up personal and company profiles to showcase your work.



CLADzine

The CLADzine digital news bulletin is available twice weekly for readers who enjoy getting the latest news delivered to their inbox in easy-to-read ezine format.

From the latest developments to breaking news about deals and awards, the CLAD team tracks the industry globally and across all sectors to keep you up to date.



CLAD-kit.net

CLAD-kit.net is CLAD's search engine for products. It gives access to the latest product launches, as well as contact details for suppliers.

If you're a supplier, your new product details are welcome – contact CLAD's Product Editor, Jason Holland, jasonholland@CLADglobal.com





Dornbracht VAIA


Create a new
balance



Winner of the
2017 European
Prize for
Architecture

“I have tried to use my European roots to re-enchant architecture and our cities”

Manuelle Gautrand founder **Manuelle Gautrand Architecture**



Judges praised
Manuelle Gautrand
for her surprising, bold
urban architecture

French architect Manuelle Gautrand has been awarded the 2017 European Prize for Architecture, becoming the first woman to receive the prestigious accolade.

The European Centre for Architecture Art Design and Urban Studies and the Chicago Athenaeum: Museum of Architecture – which jointly present the prize – praised Gautrand and her eponymous practice “for making special places and distinct spaces that celebrate ordinary life in our complex urban cities and our diverse cultural situations.”

She was also hailed for “developing a public and civic architecture that opens up the realm of possibilities for unique space.”

Shaping leisure spaces

Gautrand founded her office in 1991 – first in Lyon and, since 1994, in Paris. Among her firm’s broad portfolio are diverse leisure facilities, including theatres, museums, cultural centres and sports facilities.

In 2011, she converted the Gaité-Lyrique Theatre into a centre for modern music and digital arts. Last year, she completed the restoration of the historic Gaumont-Alésia cinema in Paris, creating a cultural hub with an eye-catching ‘pixelated’ LED facade. Other projects include the copper-clad Forum sports complex in Alsace, the striking Hipark Hotel in Paris and an extension of the Lille Museum of Modern Art. She is currently working on a civic and cultural centre in Parramatta, Australia.

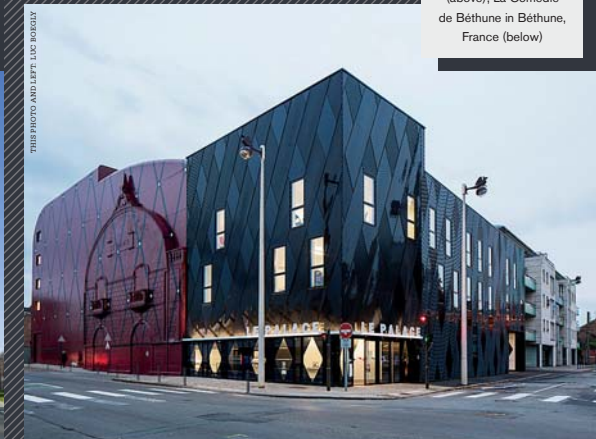
“Manuelle Gautrand has worked diligently to ‘re-enchant the city’ by reinventing, renewing and innovating a pluralistic design path full of unexpected answers, risk-taking,



The Galté Lyrique Theatre, Paris (above);
The Hipark Hotel, also in Paris (below)



The Alesia Cinemas (above); La Comedie de Béthune in Béthune, France (below)



surprises and architectonic expectations that are bold, refreshing and equally provocative," said Christian Narkiewicz-Laine, president of the Chicago Athenaeum.

"Her firm understands that architecture and its surroundings are intimately intertwined and knows that the choice of materials and the craft of building are powerful tools for creating lasting and meaningful spaces.

"For these reasons, exemplified in all the firm's built work, and for the firm's ability to express

the local, but also the universal, uniting us with one another through the art of architecture, Manuelle Gautrand Architecture is awarded the 2017 European Prize for Architecture."

Speaking to CLAD, Gautrand said: "I'm very happy to receive this prize, especially as it's a specifically European one. Indeed, I am ardently passionate about Europe, and I consider myself more a European architect than a French one.

"This prize is awarded to architects 'who have made a commitment to forward the principles of

European humanism and the art of architecture.' Since the beginning of my career I have tried to express and emphasise such a commitment, to use my – or I would rather say – European roots to re-enchant architecture and our cities."

She added: "This prize comes as a honour, but also as an even bigger driver for me to make European architecture shine."

Previous European Prize for Architecture laureates include Bjarke Ingels, Graft Architects, Alessandro Mendini and Santiago Calatrava.

We were set the target of building one of the five best stadiums in the world

Antonio Cruz co-founder Cruz y Ortiz

The striking new home for Spanish football side Atletico Madrid has hosted its first match – a 1-0 win over La Liga side Malaga.

The club invested a reported €300m (US\$360m, £265m) on the 68,000 capacity Wanda Metropolitano, replacing the Vicente Calderón Stadium – its home of over 50 years.

Spanish architecture practice Cruz y Ortiz were responsible for the project. Rather than building a new stadium from scratch, they were tasked with renovating and expanding the existing Estadio Olímpico de Madrid – a 20,000-seat athletics venue built in 1994.

Parts of the original concrete stand have been incorporated into the new stadium, with much of the remainder demolished in order for new stands to be added, more than doubling the capacity.

"Our aim was not to recreate the famous atmosphere or appearance of the Calderón," the studio's co-founder Antonio Cruz told CLAD. "This was a new proposition, and our responsibility was to find something



PROJECT

Wanda
Metropolitano,
Madrid

new to help the club take another step forward. At this moment, Atletico are already one of the top teams in Europe, and this stadium can take them to the very top."

Cruz said the biggest challenge was unifying the existing elements of the Estadio Olímpico structure with the newly constructed ones.

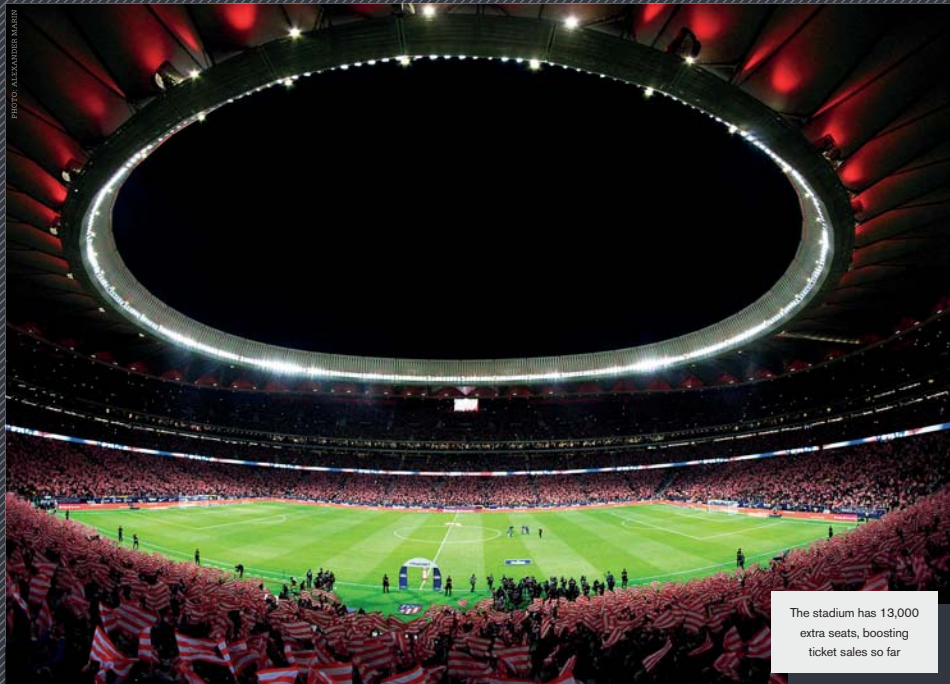
"Our answer was to cover it with a new roof," he said. "It brings everything together as one building. We've adopted a new technique never used before to make a canopy membrane – using an exterior steel and double height compression ring, an interior traction ring and two sets of radial cables. It's the most innovative part of this project!"

The open tensile structure, built by construction firm FCC, weighs around 6,336 tons, and the membrane occupies a surface area of 83,053sq m.

Advanced technology has also been integrated into the new stadium, including three jumbo screens, a videomapping facade on the exterior of the stadium, and 1,200 wifi elements to ensure easy internet access.



The stadium's canopy membrane roof is an innovative new feature



The stadium has 13,000 extra seats, boosting ticket sales so far

"The club wanted advanced technology from the beginning," said Cruz. "We enjoyed and appreciated that challenge. We were set the target of building one of the five best stadiums in the world and a building that can be used long into the future, hosting top national and international finals."

Other features of the stadium include a fan plaza open on matchdays, where spectators can enjoy music, entertainment and interviews with notable club figures. A retail megastore will be among 16 commercial outlets, and a club museum is also planned.

Atletico were permitted by La Liga to play their first three games of the season away from home, allowing workers to add the final touches to the Wanda Metropolitan before it officially opened in mid-September.

New stadiums are also in the pipeline for La Liga rivals Barcelona and Real Madrid, with architecture firms Nikken Sekkei and gmp architekten, respectively, designing those projects.



Studio founders Antonio Cruz Villalon (left) and Antonio Ortiz Garcia

PROJECT

Landmark
Mandarin
Oriental,
Hong Kong

“Our brief was to create an exclusive suite dedicated to extravagant entertaining”

Joyce Wang founder Joyce Wang Studio



Joyce Wang's Hong Kong and London practice has worked extensively with Mandarin Oriental

Hong Kong's Landmark Mandarin Oriental hotel has opened its newest and largest suite, designed as the "ultimate retreat for socialising" by Joyce Wang and her studio.

The 2,250sq ft (209,000sq m) Entertainment Suite has been conceived as "a welcome respite from Hong Kong's hectic streets", with a subtle, nature-inspired colour palette and soft custom-designed furnishings created by Wang – including hand-chiselled cabinet doors adorned with hand-painted art and a chandelier composed of individual glass-moulded LED squares resembling frozen cubes.

The suite, commissioned as a space "for extravagant entertaining", includes a master bedroom; a kitchen and dining area for private banquets; a master bathroom built round a free-standing one piece marble Palissadro bathtub; and a high-tech audiovisual lounge.

The latter features a 160-inch TV screen with a laser projector, an advanced sound system and a custom-designed coffee table containing interlocking compartments, crafted from gouged timber, for storing virtual reality headsets and gaming equipment.

"As with every project, we considered how users would interact with the space," Wang told CLAD. "We wanted

to create multiple layers so guests could discover something new every time. This sense of discovery is also reflected in the choice of materials and contrasting textures. Our aim was for the space to feel like a home but for guests to appreciate the tactility of the materials.

"One of the main challenges was to create something flexible enough to cater to different kinds of events and parties while still maintaining a certain level of intimacy for private dinners or smaller gatherings."

Guests enter the suite via a main living area featuring a sculptural 'Cabinet of Delights' that spans the length of the room. This comprises several individual cupboards that are crafted in liquid metal and intricately engraved with tree branch silhouettes. Each contains "a thoughtful amenity, an individual surprise or a personalised service", including a mixologist dispensary, a crystal vitrine stocked with delicacies, and a movie-style popcorn machine.

Wang has previously redesigned 120 suites at the hotel, with "an understated but sophisticated luxury".

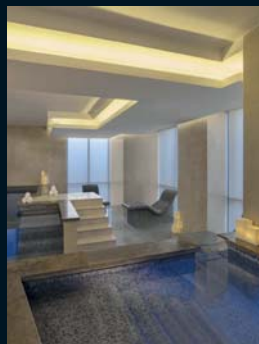
She was recently commissioned to lead a multi-million-pound restoration of 181 rooms, suites and public areas at the Mandarin Oriental Hyde Park in London – the hotel's European flagship. ●



The suite is made for parties, social gatherings and hosting private dinners



The colour palette and materials are inspired by nature





BARR + WRAY

CREATORS OF WELLBEING AND RELAXATION

Interior Design | Engineering Design | Pool + Thermal Installation | Maintenance

Middle East + Asia

Barr + Wray Dubai

T: + 971 4320 6440

E: sales@barrandwray.com

UK + Europe

Barr + Wray

T: + 44 141 882 9991

E: sales@barrandwray.com

Asia Pacific

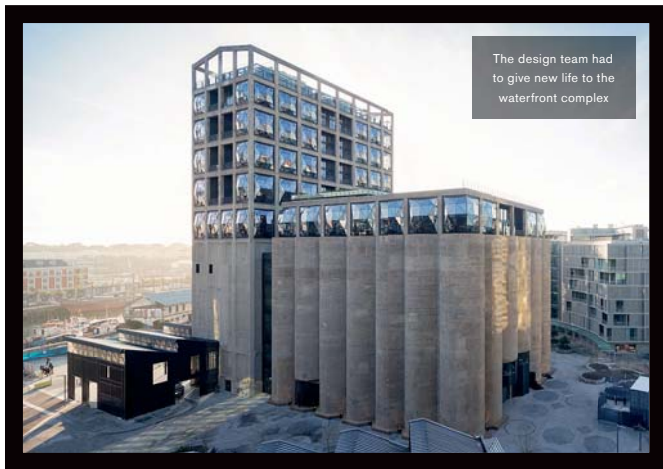
Barr + Wray Hong Kong

T: + 852 2214 9990

E: sales@barrandwray.com

www.barrandwray.com

CLAD News



The design team had to give new life to the waterfront complex

Heatherwick Studio transform Cape Town grain silo into art museum



The idea of turning a giant disused grain silo made from 116 vertical tubes into a new kind of public space was weird and compelling

Thomas Heatherwick

Heatherwick Studio's latest completed building, the Zeitz Museum of Contemporary Art Africa (Zeitz MOCAA) has been unveiled on Cape Town's V&A Waterfront.

The museum – the largest in the world dedicated to contemporary art from Africa and its diaspora – is housed in 9,500sq m (102,000sq ft) of custom-designed space, created within the city's monumental, historic Grain Silo building.

The design team were tasked with giving new life to the iconic structure, which had been disused since 1990 and is located on the edge of a historic working harbour, with the famous Table Mountain

as its backdrop. The galleries and the atrium space at the centre of the museum have been carved from the silos' dense cellular structure of forty-two connected tubes. There are 6,000sq m (64,500sq ft) of exhibition space across 80 galleries, plus a roof-top sculpture garden, conservation areas, a bookshop, reading rooms and a bar and restaurant.

"We were excited by the opportunity to unlock this formerly dead structure and transform it into somewhere for people to see and enjoy the most incredible artworks from the continent of Africa," said Thomas Heatherwick, founder of Heatherwick Studio. "The technical challenge was to find a way to carve

out spaces and galleries from the ten-storey high tubular honeycomb without completely destroying the authenticity of the original building.

"The result was a design and construction process that was as much about inventing new forms of surveying, structural support and sculpting, as it was about normal construction techniques."

The R500m (US\$40.3m, €33.8m, £30m) project has been largely funded by South African philanthropist Jochen Zeitz.

Hospitality group The Royal Portfolio are operating a luxury hotel which occupies the six storeys above the museum – a space which formerly housed the grain elevator.

The dramatic space at the heart of the museum has been carved from the original concrete silos





It's an architecture that is protective of its treasures

Jean Nouvel



The museum's domed roof features 7,850 patterned perforations



A system based on ancient Arabic engineering allows water to flow between the outer areas of the museum



PHOTOS: GUY LAWRENCE/ASSOCIATED PRESS

Jean Nouvel's Louvre Abu Dhabi finally opens

The long-delayed and even longer-awaited Louvre Abu Dhabi has finally been completed, with the Jean Nouvel-designed cultural institution welcoming its first visitors.

A string of setbacks dating back more than a decade delayed the AED4.3bn (US\$1.2bn, €1bn, £914m) project, partly caused by a complex curation process that has seen 600 artworks collected for display, half of them loaned by 13 French museums.

The Louvre Abu Dhabi's domed roof is an artwork in itself, with eight layers of steel featuring 7,850 patterned perforations. This uses the sun to create a 'rain of light' effect, with intricate and ever-changing patterns projected on the building's interiors.

Nouvel has designed a system based on ancient Arabic engineering that allows water to flow between the outer areas of the museum

and into the galleries inside.

"After several years of study and construction, guests will be able to enter this place of light, this revelatory meeting place of a number of planetary cultures beyond the seas and centuries," he said.

"It's an architecture that is protective of its treasures; it's a homage to the Arab city, to its poetry in geometry and light; and, under the large cupola, it's an evocation of the temporalities which inexorably punctuate the hours, days, and the passing of our lives."

In addition to the 23 permanent galleries, the museum includes exhibition spaces, a children's museum, a restaurant and a café.

The building anchors the under-development Saadiyat Cultural District and is set to eventually be joined by the Zayed National Museum, designed by Foster and Partners, and Frank Gehry's Guggenheim Abu Dhabi.

Henning Larsen win architecture competition for leisure-filled landmark in Manila

Danish architectural firm Henning Larsen have won an international design competition for a striking leisure-filled skyscraper in the heart of Manila, the Philippines. The ICONE Tower – located in the Bonifacio Global City financial district – will stand at 308m (1,010ft) and has been conceived to redefine the city's skyline, with

its distinctive pointed form, which will be illuminated at night.

According to the design team, the project will "set an example for how tall buildings should give back to a city and its people and how to revitalise an entire area."

The mixed-use high-rise will house offices, public spaces, large atriums and green terraces. A public observatory will top the tower, with visitors ascending to it via a spiralling walkway.

Surrounding the building, a large public plaza will provide "a protected space for popular activities and social gatherings to create life in the heart of the city." It will be shaded by a canopy of dense trees, intended to mimic the country's tropical rainforests, and feature restaurants, a civic centre and exhibition spaces.

"We aimed to make it a truly Filipino building by understanding and integrating powerful elements of local nature, culture and climate,"



“This building represents a milestone for Manila and the Philippines”

Claude Bøjer Godefroy

The ICONE Tower will have a public observatory with a spiralling walkway



IMAGES: HENNING LARSEN

Henning Larsen's ICONE Tower will be over 1,000ft tall and 'redefine Manila's skyline'

said Claude Bøjer Godefroy, partner and design director at Henning Larsen's Hong Kong office.

"The tower also represents an ambition to discover what contemporary Filipino architecture is about, and we hope it can inspire other local builders to join this search for identity and character.

"The project carries a high level of responsibility, not only in relation to the materials used, but also when it comes to the creation of positive, social spaces which encourage community."

The design has been created in collaboration with landscape architects SLA and BuroHappold Engineering.





Vivid LED lights illuminate Setsugekka's surreal interiors

DHR / SHANGHAI SUDYU

The colours and cultural traditions of the changing seasons in Japan have inspired architect Sun Tianwen to design an eye-catchingly luminous restaurant in the city of Changchun, China.

The concept for the 1,300sq m (14,000sq ft) restaurant, called Setsugekka, derives from the ancient Japanese art and design tradition of the same name, which celebrates the motifs of snow, moon and flowers, and the passage of time throughout the year.

Sun's restaurant features vivid LED lights, which change to illuminate the space in the colours of blue-white for winter, yellow-white for autumn and pink-white for spring.

The different elements in the minimalist space – including clear glass dividers, floor-level lighting and a black background to the sushi counter – have been arranged to come together harmoniously as “a full expression of Zen.”

“No matter how exquisite a concept and definition are, most spaces ends up being judged by form alone,” said Sun, who leads design studio Shanghai Hip-pop. “We reject any simple theory or opinion. Instead we want to achieve something deeper when embracing the architectural and interior environments that we live in.”

‘A full expression of Zen’ Architect Sun Tianwen inspired by Japanese seasons to create vivid Setsugekka restaurant



“The feelings this space evokes were our most important consideration when it came to the design of this project.”

Sun Tianwen



The different design elements have been arranged to come together harmoniously





Winy Maas, MVRDV

Landscape architect
Piet Oudolf will
greenify the towers

Building or valley? Construction begins on MVRDV's green-topped Amsterdam leisure complex

Construction has begun on a green-terraced, mixed-use building located in Amsterdam's Central Business District – the latest leisure project from Dutch architects MVRDV.

The studio's design for developer OVG Real Estate includes shops, bars, restaurants, cultural facilities, apartments, offices and a sky bar spread across a sprawling forested man-made valley.

The purpose of the 75,000sq m (807,300sq ft) development, set for completion in 2021, is to transform the commercial district into a more liveable and complete urban quarter.

The building, called Valley, will have three towers of varied heights, reaching up to a maximum of 100m (329ft), with numerous

green terraces ascending each.

A reflective glass exterior façade will mirror the corporate surroundings of the neighbourhood, while in contrast the inner façade will be defined by a series of rugged stone terraces with large planters, covering the building in vegetation and bringing a sense of human scale to the volume.

The public will access the building from street level, via a pedestrianised path that climbs up to an area of public realm spread across the fourth and fifth levels.

"There will be many terraces, both private and public, filled with people, flowers, plants and outdoor seating," said MVRDV co-founder Winy Maas, who is leading the project.

Knight Dragon reveals first glimpse of its diverse London Design District

International developer Knight Dragon has unveiled its plans for a new London leisure district featuring affordable workshops for the capital's creatives.

The Design District will provide a permanent base for over 1,800 people working in the fields of design, art, technology, crafts, music, food and digital innovation. Rents will average £25 (US\$33, €28) per square foot.

The district is one of seven elements Knight Dragon has planned for its wider Greenwich Peninsula scheme, which will include 15,720 new homes, a large film studio and a 5km sculptural running trail.

London architecture practice Assemblage are masterplanning the 10,000sq m (107,000sq ft) project, and landscape architects

Schulze+Grassov have designed the public realm, including a series of courtyards, a central public square and a pedestrianised quarter.

To mix and juxtapose architectural voices, eight emerging practices have been selected from across Europe: 6a Architects; Mole; Architecture 00; Barrozi Veiga; SelgasCano; Adam Khan Architects; David Kohn Architects; and Assemblage themselves.

Each were given a pair of arts and leisure buildings to design 'blind' from each other, "creating a provocative diversity of colour and form."

Knight Dragon chief executive Richard Margree said: "There will be artists mixing with start-ups, mixing with independent market traders and design companies, large and small – everyone is welcome."



IMAGE: KNYT DRAGON/LEONIEK BOWEN

SelgasCano's
market hall will be at
the district's heart

IMAGE: MATTHEW THOMPSON

Hannah Corlett and Peter
Besley lead Assemblage,
the practice masterplanning
the Design District



The wave-like motion of the design was developed to reflect the movement of the Qianjiang River



It's an 'all-in-one' destination for working, living and leisure in a highly sustainable environment

Ben van Berkel

UNStudio completes Hangzhou 'city in a city' with wave-like tower complex



The development is spread across two twisting towers

Dutch design practice UNStudio have completed a vast leisure complex in Hangzhou, with a pair of sinuous towers providing a dramatic new landmark for the Chinese city.

The 400,000 sq m (4.3 million sq ft) Raffles City development – nine years in the making – has been conceived as a lively vertical neighbourhood and transit hub for the Qianjiang New Town district, featuring apartments, a Conrad hotel, restaurants, shops, sports facilities, metro links and a landscaped public plaza.

The two streamlined towers, clad in a scale-like skin of aluminium tiles, are set atop a 116,000 sq m (1.2 million sq ft) six-storey podium overlooking the city's Qianjiang River and West Lake.

"The building will be a point of confluence, a hub for business conduct and a new destination for visitors and residents alike," said UNStudio founder Ben van Berkel.

The plan is organised as two diagonal and intersecting figure-of-eights. Positioned on opposite

corners, each tower consists of an 'urban façade' that frames the urban corner of the site and a horizontally articulated 'landscape façade' that descends into the inner courtyards at podium level. The wave-like motion of the design was developed to reflect the movement of the river. According to van Berkel, "these concentric waves increase in their dynamism, starting calmly at the base and building up more vigorously along the vertical axis, enabling us to connect the wide variety of programmes throughout the building into one seamless flow."

Inside the podium a vast atrium designed as a spiral of overlapping layers forms the organisational and visual focus, "creating seamless connectivity and extensive sightlines between the spaces". From here, residents and visitors can access Raffles City's mix of facilities. In a statement, UNStudio said: "Besides working and living at Raffles City, people can stay at the hotel, or pick up groceries, enjoy a meal, do exercise, watch a movie or even get married there."



IMAGE: PRESS ASSOCIATION

Paris has been awarded the 2024 Olympic and Paralympic Games, with LA agreeing to host the event four years later

IOC approves Paris 2024 Olympics masterplan designed by Populous and Egis

The International Olympic Committee (IOC) has officially approved plans to transform Paris into an Olympic Park for the 2024 Olympic and Paralympic Games – a decision which will see sporting events take place against the spectacular backdrop of the city's historic buildings, streets and landmarks.

The Champs Elysees and the River Seine are among the 38 Olympic and Paralympic venues spread across the French capital, while beach volleyball will be held at the foot of the Eiffel Tower.

The concept to integrate sport into the very centre of the city is the brainchild of sports architects Populous and Egis, the Paris-based, international consultancy, engineering and operation group.

The pair were chosen in 2016 to collaborate on the Paris 2024 bid, and were tasked with envisioning “the most sustainable Games ever.”

“Our mission was to understand whether each sport and discipline would best function in existing venues, new buildings when required for legacy, or temporary modular sites, and then identifying the best option in each case,” said Egis project director Diogo Taddel.

“One of the biggest challenges was to transform illustrious Parisian monuments into sports venues, adapting them to the requirements of the Olympics and Paralympics.”

Populous senior principal Ben Vickery added: “The city of Paris will be a magnificent Olympic Park and transforming some of the world's most beautiful and historic

sites into temporary stunning stages for sport will provide unforgettable images globally.”

The practice's involvement with Paris 2024 takes its overall major events experience to 13 Olympic and seven Paralympic Games, including Sydney 2000 and London 2012 – for which it designed the main stadiums – and Rio 2016.

Egis has designed several French sports grounds, in addition to the Baraki stadium in Algiers, Algeria; and the Olympic stadium in Istanbul, Turkey.

In a historic move, the IOC has awarded Los Angeles – which had competed against the Paris bid – the 2028 Games. The city agreed to leave a clear path for Paris in 2024 after reaching a special agreement with the committee.

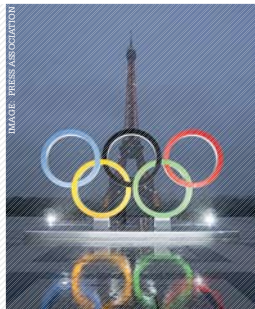


IMAGE: PRESS ASSOCIATION



IMAGE: LOGICSON

Sports venues will be built around a number of Parisian landmarks



Bringing people together to enjoy an unforgettable experience is the overriding ambition of Populous

Ben Vickery

Thai studio create bold bamboo sports hall for Chiang Mai school

Thailand-based architecture and engineering practice Chiangmai Life Construction (CLC) have developed a net zero sports hall made entirely from bamboo, earth and stone.

Panyaden International School in the city of Chiang Mai required a larger assembly space and an indoor sports facility protecting students from the worst of the elements in both the wet and dry seasons.

CLC had previously designed the school's other buildings, using rammed earth building methods and layered bamboo roofs, and

The huge bamboo arches create a space that is large and cosy at the same time

Chiangmai Life Construction

were commissioned to create the new 780sq m (8,400sq ft) space.

The school bases its core teachings on Buddhist educational principles, and as such the lotus flower – an important symbol in the religion – inspired the structure's form. The brief also called for an environmentally mindful building with a low carbon footprint, so CLC used all natural materials, creating bamboo trusses. These were lifted into place and span more than 15m (49ft) without any steel reinforcements.

"Two engineers were used to carefully calculate the loads, tensions and shear forces," said a CLC statement. "We designed the structure according to 21st century engineering practices,



The building's form is inspired by the lotus flower

with the huge bamboo arches creating a space that is large and cosy at the same time. Ventilation is provided through openings between the three-layered roof. These openings also bring in light."

The hall is used for futsal, volleyball, basketball and badminton. Elevated balconies provide observation areas.

The project was delivered at a cost of just US\$300,000 (€256,500, £230,000).



Markus Roselieb, principal, Chiangmai Life Construction



The hall provides space for school sports and events

PHOTOGRAPHY: BERT THOMPSON/PHOTO FOR REALISMO/REDAUT



The design is reminiscent of a bird's nest or natural dam

Arctic Bath hotel and spa will float on a river in Swedish Lapland



The spa and hotel will be frozen in place during the winter



The Arctic Bath, a unique luxury hotel and spa floating on the Lule river in Swedish Lapland, is scheduled to open in 2018.

Reminiscent of a bird's nest or natural dam, the exteriors of the circular spa buildings will be covered with piled logs, providing added insulation to guests during the winter months.

The spa buildings – housing saunas, treatment and relaxation rooms, a restaurant and a lounge bar – will encircle an open-air cold bath. The facility can be used for small conferences, smaller group events and private parties.

Designed by architects Bertil Harström and Johan Kauppi, the concept for the Arctic Bath was inspired by the region's logging heritage, with its distinctive design acting as a reminder of the importance of the forest in Swedish history. The main form of the spa complex is inspired by a jam of floating timber in the river. Hotel accommodation will take the form of six minimalist floating cabins, each 25sq m (270sq ft), which will



Architect Bertil Harström has collaborated on the project with Johan Kauppi

be moored to the spa buildings.

Arctic Bath – open all year – will be free-floating on the river during the summer and frozen in place in winter. It will be located outside the village of Harads, 50km south of the Arctic Circle.

The project is being developed by Arctic Bath AB, which believes the hotel and spa “will soon become a fully-fledged attraction.”

The company includes the creator of Harads' famous Treehotel – a woodland retreat where guests stay in treehouses – and the two projects are set to be linked.



“The room décor pays homage to two very important periods in Parisian history”



Design duo Humbert & Poyet have created the bedrooms, which pay homage to both the 19th century and the 1950s

The Hoxton takes over historic Paris townhouse with stylish boutique hotel

Boutique hotel group The Hoxton has debuted its fourth global property, which occupies an 18th century Paris townhouse once home to Louis XV's main courtiers.

The Hoxton, Paris – located on Rue du Sentier in the French capital's 2nd arrondissement – occupies three buildings and has 172 bedrooms, two courtyards, a modern French brasserie, an intimate bar, seven meeting rooms and a communal pantry kitchen.

The building, originally designed by architect Nicolas d'Orbay for diplomat Etienne Rivivié, has sat empty for more than a decade and was last used as a clothing factory.

A trio of design firms have spent the last four years carefully renovating the property, taking inspiration from the diversity and originality of the streets and scenes that surround it.

Parisian studio Humbert & Poyet have created the bedrooms, British firm Soho House have worked on the public spaces, while Ennismore Creative Studio have overseen the

project. Their interventions have had to be subtle as the building is a 'monument historique' – a title it shares with the likes of the Eiffel Tower, Le Louvre and Notre Dame.

To retain the character of the original, the building's façade – originally created Nicolas Pineau, a leader of the Parisian high rococo style – has been extensively restored to bring back its original grandeur, while two 300 year old spiralling staircases have been renovated.

Original iron columns have been repurposed, 18th century tiles have been reset and existing old roof timber beams have been exposed in several of the bedrooms.

Contemporary feature walls and laminates bring the rooms up to date with this century.

"With Lampe Gras lamps, woven metal partitions, classic 1950s materials such as Formica, and references to designers such as Jean Prouvé and Mathieu Matégó, the room décor pays homage to two very important periods in Parisian history: the late 19th century and the 1950s," said the design team.



Napier City Council's Sally Jackson said the aquarium will be 'an eco-tourism destination of major significance'



IMAGES: NAPIER CITY COUNCIL

Weta Workshop to bring 'wow factor' to NZ\$45m Napier Aquarium redevelopment

Weta Workshop – the special effects and prop company behind such epics as *The Lord of the Rings* and *Avatar* – have thrown their weight behind a NZ\$45m (US\$32.5m, €27.5m, £25.3m) redevelopment of the Napier National Aquarium in New Zealand.

Napier City Council (NCC) has announced the plans, which will see the aquarium on Marine Parade almost treble in size, from 3,400sq m (36,600sq ft) to 11,100sq m (120,000sq ft). Weta Workshop will be given "creative licence" to come up with a unique design for the development.

"It puts us on the map as a conservation centre of excellence and an eco-tourism destination of major

significance," said council member of visitor experiences, Sally Jackson.

"Weta Workshop has come on board as our design partner to create the wow factor and help us tell our stories in an innovative, original way."

NCC will provide NZ\$7m (US\$5m, €4.3m, £3.9m) in funding towards the development, with the remainder sought from a mix of public and private investment.

"We're on a mission to create an absolutely extraordinary experience so that people coming to New Zealand will not be able to leave without spending time at our aquarium," said Napier mayor, Bill Dalton.

Construction is scheduled to start in 2019, with the projected opening date set for 2021.

Film production backlot inspires Equinox Century City club design

A luxury health club inspired by a film production's backlot has been unveiled in California by fitness operator Equinox.

Located in Century City, Los Angeles, and designed as a chic and aspirational venue, the panoramic 2,800sq m (30,000sq ft) facility includes expansive locker rooms with luxurious amenities, a 371sq m (4,000sq ft) outdoor lounge and convertible wall systems that enable indoor-outdoor programming experiences.

The project was designed by Equinox and Montalba Architects.

"Expansive 20-foot ceilings open the building's frame for picturesque floor-to-ceiling windows that are completely unique to LA and our facilities," said Aaron Richter, senior



Aaron Richter, senior vice president of design for Equinox

vice president of design for Equinox.

"Taking aesthetic inspiration from a film production's backlot, we utilised studio lighting, sound-proofing materials and film equipment lenses as design touches that subtly nod to this vibrant community."



Hollywood glamour inspired the health club

John Klein, senior vice president at Equinox, added: "Equinox Century City was conceived to cater to entertainment industry titans and the hardcore health-minded alike"

The club features four dedicated studios for yoga, Pilates, cycling and group fitness classes.



Vast Bürgenstock Resort Lake Lucerne re-opens among Swiss Alps

Switzerland's famed resort opens after a €480m, nine-year revamp, aiming to appeal to a new generation of visitors. Kim Megson takes a look

Sophia Loren lived there, Audrey Hepburn was married in the chapel, Charlie Chaplin was a regular visitor and Sean Connery's James Bond dropped by in *Goldfinger*. Now the Bürgenstock Resort Lake Lucerne has been transformed to appeal to a new generation of visitors passing through the Swiss Alps.

The iconic resort has had a soft re-opening after nine long years of construction and renovations, with its Qatari owners claiming to have overseen "the project of the century."

The refreshed resort, located 500m (1,600ft) above Lake Lucerne, includes more than 30 buildings, with four hotels, 10 restaurants and bars, a museum, a cinema, a 10,000sq m (108,000sq ft) Alpine Spa and an infinity pool overlooking the lake.



This resort used to be a destination that everyone in Central Europe knew about – from the aristocracy to cinema stars and politicians, so we had a lot of history to draw from

Maria Vafiadis, MKV Design founder



• The hotel rooms are designed so that the views take centre stage

Developer Katara Hospitality has invested at least CHF550m (US\$565m, €480m, £426m) in the project, which includes both new build and renovation elements.

The 102-bedroom, five-star Bürgenstock Hotel, designed by Rüssli Architekten, and the Waldhotel medical hotel, designed by Italian architect Matteo Thun, have been built from scratch, while existing buildings, including the Taverne 1879 and the Palace Hotel, have been retained but entirely remodelled.

The former Grand Hotel has been transformed into luxury apartments and the resort's original chapel – where Hepburn wed actor Mel Ferrer – has been kept, as have the nine-hole golf course, ice skating rinks and Europe's highest outdoor elevator, the Hammetschwand Lift, which

● The resort is situated 500m above Lake Lucerne. All of the guestrooms face the lake



● Audrey Hepburn and Mel Ferrer were married at the resort's chapel in 1954. London-based architecture and interiors firm MKV Design were responsible for most of the hotel and spa interiors

brings guests up from the foot of the mountain.

MKV Design have created most of the hotel and spa interiors, except for the Waldhotel.

Speaking about their approach, MKV Design founder Maria Vafiadis told *CLAD*: "This resort used to be a destination that everyone in Central Europe knew about – from the aristocracy to cinema stars and politicians, so we had a lot of history to draw from.

"We also took inspiration from the lake and the water. In the Bürgenstock Hotel, the whole design is focused on the view, with all the rooms oriented to look onto the lake. You're so high up, it's like you're in a helicopter – you get this sensation of flying. Because this can be a little bit intimidating for people, we've created an inviting, warm feeling of cosiness. The rooms

are lovely timber boxes with a stone feature wall and a fireplace. You're cocooned in the space, but you can enjoy the dramatic view from your sitting room or even from your bathtub."

The resort's spa – which will open later this year – has been enlarged by architecture firm Dierks & Sachs to almost five times its original size, with the extra space created by digging into the mountain itself.

The 7,000sq m (75,347 ft) interior space will feature floor-to-ceiling glass walls providing mountain views. Facilities include private bath chambers, a Turkish steam room, a panoramic sauna and a tranquillity room.

The 3,000sq m (32,291 sq ft) spa space includes the resort's famous original swimming pool, protected as a historical monument.

Aiming to introduce leading wellbeing facilities to provide 'wellness without limits' to guests, the concept has been driven by Bruno Schöpfer, hotelier and managing director of Katara Hospitality, who is responsible for some of the world's best-known spas. He has previously said that "wellbeing is as much about the mind as the body, and this ethos is central to the design of the spa, creating a spiritual mountain-top haven."

Vafiadis described the spa design as clean and modern, explaining "we've used local wood and local stone because we don't want to distract from the location."

"It had to be neutral and contemporary while making the most of the views," she added.

The full grand opening of the resort will be held in Q1 2018. ●





Aylott + Van Tromp

SW10 | LONDON

CREATING INTERIOR ARCHITECTURE,
BUILDING BRANDS + REDEFINING STYLE

www.aylottandvantromp.com



Daniel Libeskind has designed a number of public spaces that deal with difficult or painful historical events



Architecture can only thrive
in a democratic environment

Daniel Libeskind

Renowned architect Daniel Libeskind met Kim Megson in London to reflect on some of his career-defining projects, discuss his latest commissions, and share his passion for music

The renowned paleoanthropologist Richard Leakey is planning to build a museum like no other, located on the remote shores of Lake Turkana in northern Kenya. The site is not far from the spot where, in 1984, Leakey and his team discovered the 1.6 million-year-old Turkana Boy – the oldest and most complete early human skeleton ever found.

Now he wants to establish an attraction dedicated to no less a subject than the origins of our species. To design the museum, Leakey approached an architect who has built his reputation creating cultural institutions and public buildings that convey concepts of identity, memory and belonging.

Articulating history

Daniel Libeskind once summed up his work as “meaningful architecture that articulates history,” and few architects have so openly, and at times confrontationally, used form as he does to explore abstract ideas. His buildings – from the Jewish museums in Berlin and San Francisco to Dresden’s Military History Museum and the Royal Ontario Museum in Toronto – welcome visitors into a world of sharp angles, interlocking volumes, fractures and voids.

Studio Libeskind, the New York practice the Polish-American leads alongside his wife, Nina, has over 20 major projects in the pipeline. However, it’s the Leakey museum that is occupying Libeskind’s thoughts when I meet him on a warm afternoon in London. He’s in an animated mood – his wide smile, friendly laugh and

rapid-fire delivery a contrast to his trademark all-black outfit – and he’s keen to talk about the Kenya project.

“This is one of the most exciting projects I’ve ever worked on. When I first met Richard to discuss it, there was not a question in my mind that I wanted to be involved. He’s a true visionary and not many architects are lucky enough to work with a genius like him.”

Early design sketches for the museum complex show a footprint that echoes the shape of the African continent. A cluster of buildings, including a chamber of humanity, a planetarium and a dinosaur hall, are shaped to loosely resemble Stone Age tools and are organised around a central hall that rises 15 storeys into the sky. The museum will be built using traditional Kenyan construction methods and materials “to use local genius to create a space worthy of the theme.”

“Until about 8,000 years ago, we were all Africans. This project is about Africa, but it’s also about every human alive, contemplating what accidents of nature and what adventures brought us here, and where we’re going next,” says Libeskind.

“The site is unlike any other place in the world. It’s got a beautiful range of mountains. It’s got the desert. It’s got the lake. There’s no light pollution so you can see all the stars. My idea was to connect the building to that earth and that sky because it is all interconnected in the greater story of humankind.”

“Inside, the museum is about time, but it’s also about space. We’ll use materials, proportions and spatial constructs to capture moments of revelation as people pass through the building. It’ll be as if they’re on a pilgrimage exploring the memory of humanity.”

Among Libeskind's designs are the Military History Museum in Dresden, which was completed in 2011



Provoking imagination

For Libeskind, the physical presence of a museum is every bit as important as the exhibits stored inside. A favoured maxim is "a building has to be meaningful and it has to tell a story." Perhaps his most famous museum, also his first, is the best example of this.

Twelve years passed between Libeskind completing his design for the Jewish Museum in Berlin and the building finally opening in 2001. When it opened, there were no exhibits inside to see, but visitors still flocked in their hundreds of thousands, drawn by the building's emotive, visceral, divisive design.

Almost 20 years on, the space still has the capacity to shock; its zigzagging plan evokes a broken Star of David divided by "a straight line whose impenetrability becomes the central focus around

“

I needed to explain, through the design, what Berlin once was, what it now is, and what it can be in the future

which exhibitions are organised". You enter through the city's former Court of Justice and descend into a network of intersecting, slanting corridors and voids that connect underground with Libeskind's museum.

"The idea for the design struck me suddenly, like a lightning bolt, the first time I visited the site," Libeskind remembers. "In the houses and apartments next to this Baroque building, Jewish Germans had once lived. Because they were erased from the history of the city, along with many others – the Romani, political prisoners, the infirm, the sick – I sought to construct the idea that this museum is not just a physical piece of real estate. It's not just what you see with your eyes now, but what was there before, what is below the ground and the voids that are left behind.

"I needed to explain, through the design, what Berlin once was, what it now is, and what it can be in the future. It's not some redemptive thing and equally it's not a finished story. It's a museum that provokes thought and imagination, and I think that is my function as an architect."

Memory Foundations

On 11 September, 2001, Libeskind was preparing for the public opening of the Jewish Museum later that day. By 2.30pm Berlin time, he and his team watched in horror with the rest of the world as the Twin Towers fell.

A year later he entered, and won, the high-profile ideas competition to develop the area in Lower Manhattan destroyed by the terrorist attack.

Called Memory Foundations, his masterplan had to achieve a fine balance: to mark the memory of the tragedy while fostering a vibrant working neighbourhood. In the end, half the 16-acre site was dedicated to public space, including the Memorial and the Memorial Museum. High-tech offices were planned to re-connect the historic street-grid, while the streetscape would be revitalised by above-ground retail, a transportation hub and a performing arts centre.



MUSEUM OF MODERN ARTS / GUY AROCH

Libeskind designed the extension to the Royal Ontario Museum, opened in 2007



PHOTO: GUY AROCH/SHUTTERSTOCK

An aerial view shows the zigzagging footprint of the Jewish Museum in Berlin, Libeskind's first project

INTERVIEW: Daniel Libeskind

Over the years, the project became contentious, marred by battles and legal challenges between Libeskind and the site's developer, Larry Silverstein. Silverstein had his own ideas about how the new towers should be built and brought in a star-studded and diverse team of architects to build them. Supporters of Libeskind's scheme felt he was being pushed out of the process and his concepts lost.

Now though, bridges have evidently been rebuilt and Libeskind is reflective about the results, which he says are very close to his original drawings – crucially retaining his idea for large areas of public space.

"It is fantastic," he says. "When I moved to New York from Berlin to start the project, Lower Manhattan was empty. People didn't build, office buildings were being given away for free, people left their belongings and never wanted to come back. Now, almost quarter of a million people have moved there as a result of us creating a public space that has a dignity and interest."

He admits he often found himself "under huge pressure", dealing with multiple stakeholders – a carousel of mayors, governors and transport officials – while trying to do justice to the victims of the families who lost their lives in the attacks.

Nina Libeskind

Nina Libeskind manages all aspects of Studio Libeskind, from financial planning to administration and human resources, as well as public presentations, contract negotiations and communications.

She co-founded the practice with her husband, Daniel Libeskind, in 1989, after he first proposed his design for the Jewish Museum in Berlin.

"Nobody believed such a building could be built and so we left the meeting and stood at this crossroads," he says.

"I said, 'I'm going to stay in Berlin, but under one condition: you join me.'"

"As she is not an architect, I had to learn how to explain my ideas. And believe me, Nina is a much harsher critic of my work than *The New York Times*."

"I've been so lucky to have had a collaborator in my wife, who shares my values and has always supported what we're doing. We've been married for 48 years, but we still end almost every night with a home-cooked meal, wine and flowers on the table."



PHOTO: ANA MARIE BEHRENDT

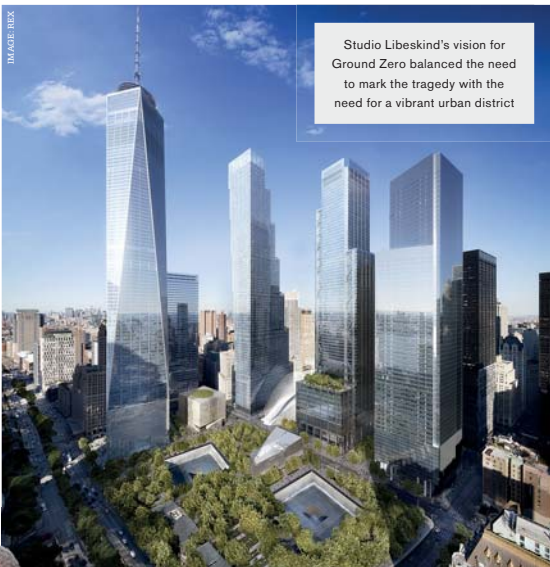


IMAGE: BEK

Studio Libeskind's vision for Ground Zero balanced the need to mark the tragedy with the need for a vibrant urban district

"There were times that were very complex and we were under high scrutiny. Every day we were criticised in the newspapers and every day somebody was photographing the garbage we were throwing out, trying to find a story. You have to have a very thick skin. But I grew up in the Bronx, and people there don't give up so easily," Libeskind says.

He describes the process he went through as "writing a large-scale score, and you're the conductor, with your back to the audience. You need total precision, while also giving interpretive freedom to the musicians. Music and architecture are totally linked in my world."

Music and architecture

As a youngster, Libeskind was a gifted musician.

"I played the accordion. I was the winner of the America-Israel Cultural Foundation Prize for Music playing that strange instrument. And I played it because my parents were afraid to bring the piano to the courtyard in Poland and draw attention to us, because of the anti-Semitism they faced. It was a dark era. So they bought me the accordion, which is a piano in a suitcase. For the competition, I was the only one – out of hundreds of kids – who had their father carry their instrument because it was too heavy for me."

Such was his prodigious talent, a 12-year-old Libeskind was advised by the violinist and conductor Isaac Stern that he had exhausted all the possibilities



One Day in Life, a 24-hour event created by Libeskind, posted 200 musicians in everyday places across Frankfurt

of the accordion and should instead master the piano. Libeskind had his doubts, and soon found a better outlet for his creativity in art and, eventually, architecture. "I didn't give up music," Libeskind says. "I just changed my instrument to architecture."

Last year, the architect was invited by Frankfurt's opera house to create "an architectural work without architecture". Called "One Day in Life", he curated 24 hours of musical performances held across the city, with nearly 200 musicians taking part.

"We reconsecrated spaces that have never had music, like a surgical room in a hospital, the city's big swimming pool, the stadium, the subway station. We filled them with ancient music, classical music, contemporary music. Thousands took part.

"Most people think you have to build something to be an architect, but architecture is more about bringing people into life than just material into life."

The Kurdistan Museum

Back in 2009, Nechirvan Barzani, the prime minister of Iraqi Kurdistan – Iraq's only autonomous region – approached Libeskind through an intermediary and invited him to come up with a design for a 150,000sq ft (14,000sq m) museum. Located in the historic city of Erbil, it would be dedicated to Kurdish culture and prepared to confront the horrors of Saddam Hussein's genocidal attack on the Kurds in the 1980s.

PHOTO: NORBERT MÜLLETZ



Libeskind brought music to spaces such as a hospital surgical room



We reconsecrated spaces that have never had music, like the hospital, the swimming pool, the stadium, a subway station



"Meaningful and hopeful": Libeskind had to keep the Kurdistan Museum project under wraps for seven years

Libeskind accepted the commission, but due to the political and religious sensitivities surrounding the project, he agreed to keep it secret. For seven years, he was only able to share details with senior members of staff. The silence was finally broken in April last year, and with the recent overthrow of Isis forces in nearby Mosul and the Kurdish people voting in favour of independence in a referendum held in September, hopes have been reignited that the project may one day proceed in an atmosphere of peace and stability.

"It was hard not to tell anyone," Libeskind says, "because this project is not just a fantasy. We're discussing it with experts, the clients and local authorities. It's a very meaningful and hopeful project."

His design is composed of four irregular sections corresponding to the four countries where most Kurds live – Turkey, Iraq, Iran and Syria – with each section taking inspiration from the respective topographical maps and population densities. The volumes are intersected by a line broken into two angular fragments, representing the past and future of Kurdistan.

"I visited the site several times to interview the people there," Libeskind says. "It was really a genocide in our time. Saddam Hussein tried to kill all the Kurds. There were deportations, murders. Many of the same stories you hear about the Holocaust happened there too. So we have to tell this story, but we also want to include a new sense of freedom and hope to reflect the reality of the Kurdish people and the Kurdish nation, because there is an ongoing story. All my work – whether it's the Jewish Museum, Ground Zero or the museum in Kenya – is at heart about the future."

“

All my work – whether it's the Jewish Museum, Ground Zero or the museum in Kenya – is at heart about the future

Democracy and design

As the conversation turns to politics, we inevitably turn to the subject of a certain Donald Trump. Libeskind is one of many high-profile architects to have hit out at the US president for his policies, particularly his attempted travel ban of citizens from several Muslim-majority countries. I ask how he assesses the political situation in America now.

"It's a throwback to a dark time – building walls, withdrawing from agreements, isolating the country, blaming others," he says. "But I don't think people in America really accept it. What it has done is to mobilise many people to be interested in politics and to have a voice. That means I remain optimistic."

If anything, he says, the political climate has only strengthened his own drive to create public buildings that can be unifying spaces, which allow people to learn about each other and to be more tolerant.

"Consensus and unity are needed to challenge the xenophobia, misogyny and fundamentalism in society. When it comes to the built environment, I think one of the biggest challenges is the lack of public participation in the design process."

Libeskind adds: "Architecture can only thrive in a democratic environment, and that means through involving people. More than just voting whether they like it or they don't like it, people should be actively encouraged to engage in conversations about architecture itself. I'm a true believer that given some tools and the right discourse, people are very creative. We see it in art. Why shouldn't people have that same chance to participate in architecture?" ●

IN THE PIPELINE

Five of Studio Libeskind's forthcoming cultural projects



IMAGE: DOUBLESSENCE PHOTOGRAPHY

• The National Holocaust Monument in Ottawa, Canada

The Canadian government commissioned this permanent, national symbol that will honour and commemorate the victims of the Holocaust and recognise Canadian survivors. The Monument, which opened on 27 September, is located across from the Canadian War Museum. It is conceived as an experiential environment comprised of six triangular, concrete volumes configured to create the points of a star – a symbol that millions of Jews were forced to wear by the Nazis to identify them.

IMAGE: STUDIO LIBESKIND



• The Modern Art Center in Vilnius, Lithuania

Dedicated to the exploration of works created from 1960 to the present by Lithuanian artists, this 3,100sq m museum is set to be surrounded by a new public piazza located close to the medieval city of Vilnius. Two volumetric white concrete

forms will intertwine to create a structure that flows between inside and outside. The interior courtyard will cut through the entire form and feature a dramatic staircase that leads to a public planted roof and sculpture garden. Completion is slated for 2019.

• The Zhang Zhidong and Modern Industrial Museum in Wuhan, China

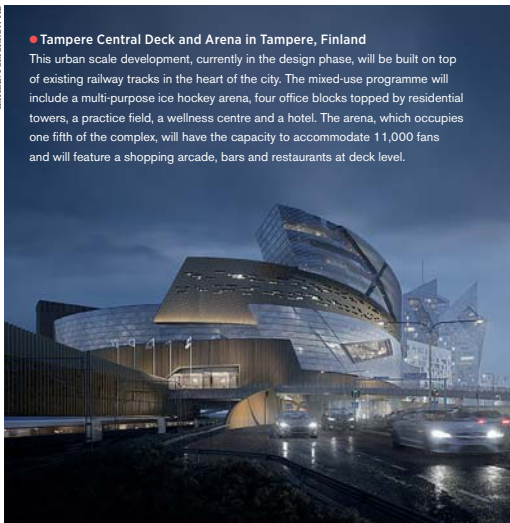
This museum, dedicated to Zhang Zhidong – a 19th-century leader in government who inspired the movement towards modernisation that established China's steel industry – is nearing completion. The structure features a steel-clad, curved arc sweeping upwards, suspended by two steel and glass footings that provide space for the entrance lobby.



IMAGE: LIBESKIND ASSOCIATES

• The Occitanie Tower in Toulouse, France

Set to be the first skyscraper in the city, the 150m-high tower's curvaceous form is interrupted by a spiral of greenery that rises from street level up to the 40th floor. A Hilton hotel, commercial space for shops and a restaurant with panoramic views of the Pyrenees are among the leisure aspects of the project. Integrated into the overall form of the building, the facade and public platform is conceived as a continuous vertical landscape, inspired by the winding plant-filled waterways of the city's Canal du Midi.



• Tampere Central Deck and Arena in Tampere, Finland

This urban scale development, currently in the design phase, will be built on top of existing railway tracks in the heart of the city. The mixed-use programme will include a multi-purpose ice hockey arena, four office blocks topped by residential towers, a practice field, a wellness centre and a hotel. The arena, which occupies one fifth of the complex, will have the capacity to accommodate 11,000 fans and will feature a shopping arcade, bars and restaurants at deck level.

Christoph Ingenhoven

Experience as a guest of the Lanserhof Lans medical spa meant Christoph Ingenhoven had a deep understanding of the challenges of designing for the European spa group. He talks to CLAD editor, **Liz Terry**



How did you get involved in the Lanserhof project?

Thirteen or 14 years ago, I went to the Lanserhof in Lans to do the detox programme with a group of friends. It's a very difficult experience the first time you do it. You give up sugar, caffeine, nicotine and alcohol. That's a lot of things to give up at once.

After the big valley of desolation which follows, however, you feel as though you've survived something, and it makes you see yourself as a kind of hero. We did the programme for four consecutive years, and found that it just got better each year.

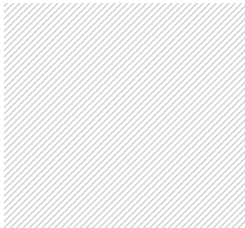
The owners, Anton Pletzer and Dr Christian Harisch, take what they do seriously. They don't see themselves as fun makers; they see the job they're doing as an important part of the life of the client.

People spend a lot of money at Lanserhof, and they do it with a smile, because they're doing something for themselves. In life, you can go for dinner and eat good food and drink the best wine, and it might be fun, but it's the kind of fun that makes you feel bad afterwards. At Lanserhof, you spend your money and it's difficult and exhausting, but you feel as though you're doing something very good for yourself and maybe also for others.

It was very important to really understand the concept of the medical spas and the kind of treatments you get in order to design for them.



At Lanserhof, you spend your money and it's difficult and exhausting, but you feel as though you're doing something very good for yourself and maybe also for others



How did your understanding of the business translate into the design for the new Lanserhof Tegernsee?

First of all, there was no brief when we started working on the designs for the Lanserhof Tegernsee, simply because everything was designed from scratch; there was no example to follow.

The original Lanserhof property, the Lanserhof Lans, couldn't be used as an example at the time, because it had been rebuilt and refurbished over the years, so it's a mixture of lots of different styles.

The owners had a great deal of experience and history, but no clear brief for what they wanted to do. We sat down with Christian Harisch and went through a very intensive workshop process. We went to Lanserhof Lans several times and looked at the site in Tegernsee very carefully; at the climate, the landscape, what we thought would work there.

There was already a hotel with a golf course on the site – called the Margarethenhof. Christian Harisch bought the place, and they started thinking about building a new Lanserhof next door.

How did the landscape influence the design of the facility?

Bavaria is quite open and not very densely populated. You tend to see just two kinds of big buildings: monasteries and farmhouses. The

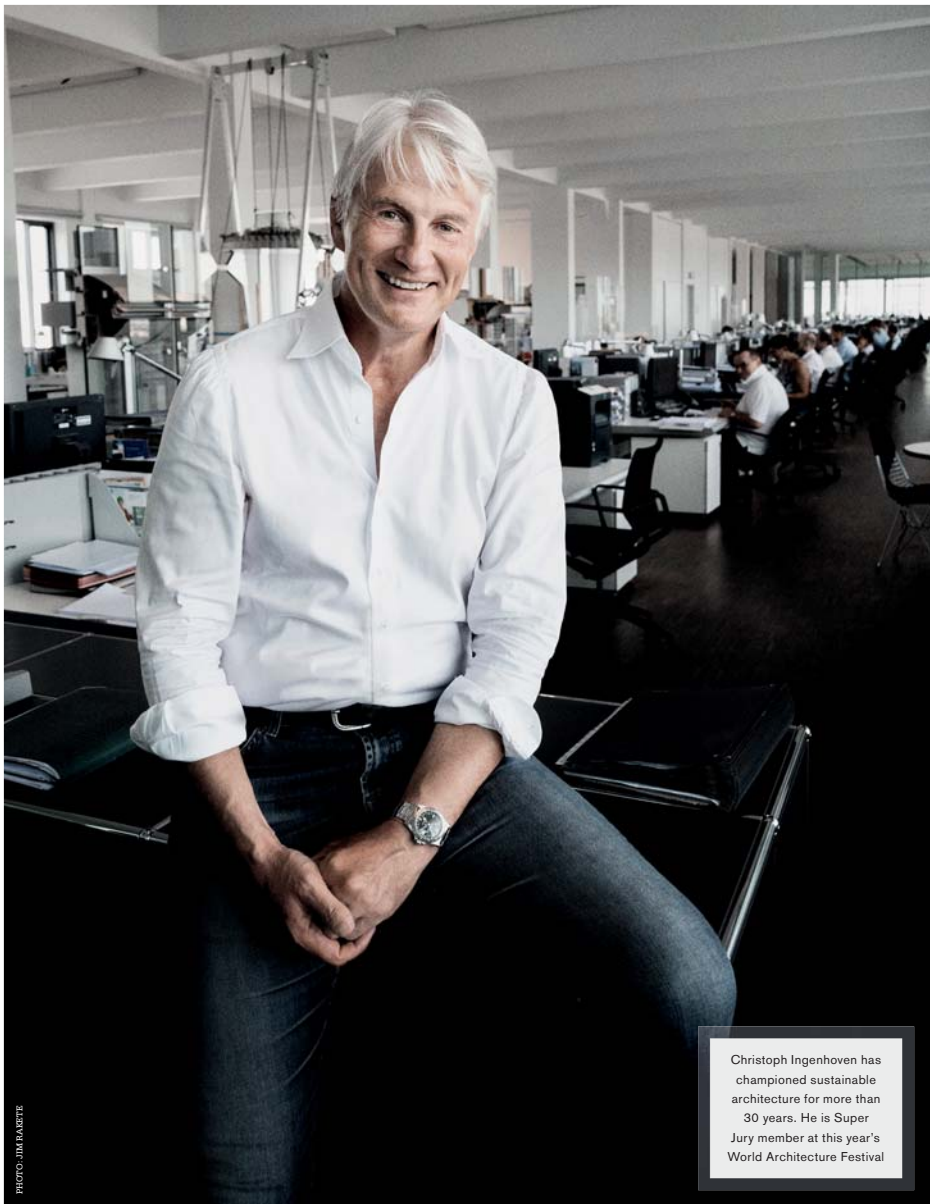


PHOTO: JIM RAMSTE

Christoph Ingenhoven has championed sustainable architecture for more than 30 years. He is Super Jury member at this year's World Architecture Festival



Ingenhoven designed tranquil spaces featuring natural materials



Christoph Ingenhoven's experience as a guest at Lanserhof Lans influenced the design of the Tegernsee site

bigger farmhouses and monasteries are always built around a courtyard, originally for protection from enemies, and also from the weather, which can be a little rough. It's not the most cozy place.

So we thought about protection and about concentration and silence, and we saw the monastery as a perfect reference point. Our idea was to have a corridor around a courtyard, with rooms going away from that, from the corridor to the outside. It's a very simple scheme, with a courtyard in the middle, all the facilities for the hotel as well as for the outpatient clinic on the ground floor, and two more levels for the hotel rooms.

How did your experience as a guest at Lanserhof Lans inform the design?

It's important to think about the guests and what they might want. People going through the detox experience often want a little distance from other people; they might not be feeling too sociable.

I think it's important to have a little silence, a little space; time for yourself. The architecture can help with that. We didn't want any artificial colours or treated materials. We wanted guests to be able to trust their surroundings; if it looks like wood, it should be wood. It's a very simple space.



PHOTO: JACQUES ESCOFFIER

The Tegersee site features a simple cubic building with clear lines



Warm colours and open fires create a cozy feel at Lanserhof Tegersee



Guest rooms at Tegersee have been designed to offer a place of refuge



The rooms at the Lanserhof Tegersee are arranged around a central courtyard

Ingenhoven designed a new five-storey, oval building for the Lanserhof Lans site

PHOTO: ALEXANDER H. JANDA



PHOTO: ALEXANDER H. JANDA

Also, because you eat very little, you can get quite cold. We wanted to add some cosiness and warmth; pillows, blankets, an open fire.

We wanted to create a very peaceful place. Also the appearance of the hotel is not dominant.

Although it's quite a big building, we've made the smallest impact visually that we could, with the wood and the grain, the very simple appearance. It's a very subtle building.

You recently completed a major expansion and renovation of the original property at Lanserhof Lans. What did that involve?

One of the reasons behind this expansion was that we didn't want Lanserhof Lans to feel second best. Many people have been going there for 20 or 30 years, and we didn't want them to feel that the facility wasn't as good as Lanserhof Tegernsee.

We demolished a small building set away from the main building, housing five or six rooms. It faced south, towards the mountains and was very quiet because it was separate from the main building, so it had potential to be a very beautiful place.

We replaced it with a modern, circular five-storey building, with two floors of accommodation and a new space for talks and events. We included some more expensive rooms; suites with private roof terraces, which have added a new level of luxury to the spa. At the same time we've added new facilities for everyone within the existing facility – we've added a new steam bath, an outside salt pool connected to an inside therapy pool, a new sauna, restaurant, treatment rooms and facilities for yoga, shiatsu and other therapies.

We also carried out a slight refurbishment to the rest of the hotel: new carpets, new paint, some new lighting and furniture. We replaced the existing



It's important to have a little silence, a little space; time for yourself. The architecture can help with that



The mixed use Marina One development brings greenery to the heart of Singapore

GREEN HEART

Marina One Singapore – Architecture for Tropical Cities

An exhibition entitled Green Heart runs from the end of October to the end of November in Berlin, showcasing the Marina One project by Ingenhoven Architects. Marina One is due to open in the centre of Singapore at the end of 2017. According to the architects: 'Marina One will act as an international role model for living and working, and makes an innovative contribution to the discourse on mega-cities, especially in subtropical regions, which, in the context of climate change, face enormous challenges. The

Exhibition

high-density building complex with its mix of uses extends to over 400,000 square meters and, with its group of four high-rise buildings, defines the 'Green Heart' – a public space extending over several stories. This three-dimensional green oasis reflects the diversity of subtropical flora.' The exhibition will present diagrams and interviews with project participants, as well as a documentary film on the architecture. The central element of the exhibition is a 5m-high sculpture illustrating the unique shape of the Marina One buildings.

Exhibition October 28 – November 30, 2017

Opening evening Friday, October 27, 2017, 6.30pm

Exhibition venue Aedes Architecture Forum, Christinenstr. 18–19, 10119 Berlin

Opening times Tuesday–Friday 11am–6:30pm, Sunday–Monday 1pm–5pm

reception with a brighter, better orientated space. We tried to add a bit more comfort and luxury, but still keep the original spirit.

Are you doing any other work with Lanserhof?

We're doing another new build Lanserhof on the German island of Sylt. It's a very interesting project. It will be an outpatients' clinic and a small private clinic on the one hand, and on the other hand a Lanserhof Hotel facility with 70 bedrooms, surrounded by some beautiful houses. That facility is due to open in 2020.

It's a beautiful island and a very prestigious place; like the Hamptons of Germany.

Architecturally, the special thing about the buildings on the island of Sylt is that they have big overhanging reed roofs. So I said that's what I want to do. I wanted to build a reed roof, because I like the material. It offers a range of possibilities; it's smooth, it's curvy, it's a material that makes soft organic shapes possible. We're building a huge reed roof – one of the biggest ever. It's a challenge and we like that kind of challenge very much.

What else are you working on?

We're currently working on the high-density, mixed use Marina One project in Singapore, which is aiming to regreen the city.

The project is flanked by two urban parks, and features two office towers, two residential towers and a retail podium set in lush greenery, with sky gardens and a biodiversity garden in the middle of the towers. It will feature restaurants and cafés, a fitness club, a food court and event spaces on the public terraces.

The buildings at the Lanserhof resort on the island of Sylt will feature reed roofs



How did you come to be an architect?

It was a natural thing for me to do because my father was an architect. At first he worked from home, so I watched him doing the drawings by hand, then later he had an office near our home, so I went there every afternoon. By the time I was a teenager I could draw, I could calculate, I could do perspectives by hand. I grew up with it.

I studied architecture at RWTH Aachen and the Academy of Arts Düsseldorf. Afterwards, I decided not to work with my father, which was difficult for him. It was a big step into the open for me, but it was the right decision and was very freeing.

What exciting opportunities are you seeing in architecture?

I'm seeing a lot of complexity in the projects coming our way. I think that there is a special will, as well as an ability in this studio, to solve these kind of complexities.

I'm very interested in aesthetics, but I never start a project with a formal idea. Instead we try to really study all the problems, the challenges, the circumstances and conditions; to fully understand them and come up with an appropriate solution. Appropriateness, I think, is a key word in our world.

Is there an area that you haven't worked in that you'd like to?

I'd very much like to design an airport. I travel a lot, and spend a lot of time sitting in lounges and on trains and aeroplanes. If we can do something to make those experiences easier and more enjoyable, that would be a good thing to do.

I would also love to design a stadium. ●

Lanserhof Development Plans

The original Lanserhof opened as a hotel in Lans near Innsbruck in 1974. In 1984 it was developed as a 67-bedroom hotel with an outpatients clinic specialising in the Mayr method.

It was acquired by Anton Pletzer and Christian Harisch in 1998, who invested heavily in the infrastructure. They were joined by Stefan Rutter, as a partner in 2009.

In January 2017, Lanserhof Lans unveiled the results of a major six-month renovation and expansion by Christoph Ingenhoven. The results include a striking new oval building with a wooden façade and a grass roof. Sixteen new suites with rooftop terraces and views stretching across the Nordkette mountains have been added, as well as a new sauna complex; indoor-outdoor saltwater swimming pool; a medical cold chamber; and advanced medical facilities for yoga, shiatsu, therapies, LANS Derma (the company's own skincare treatments) and exercise.



IMAGE: ALEXANDER HANSEN

Tegernsee is Lanserhof's third site. A fourth is due to open on the island of Sylt in 2020

The second site, the LANS Medicum, opened in Hamburg in 2012, featuring an outpatients clinic for the LANS Med Concepts and Sports and Regeneration Medicine. It specialises in sports medicine, orthopaedics and cardiology.

The third site, which sits on Lake Tegernsee in Germany, opened in 2014 and includes the 70-bedroom Hotel Lanserhof Tegernsee and an outpatients clinic. It was designed by Christophe Ingenhoven and landscape architect Enzo Enea (see p114). Wellness

architecture has been central to the offering at Tegernsee, with a minimalist three-colour palette, which give guests the opportunity for clutter-free surroundings that are conducive to mental healing.

The team is now looking ahead to the next location, a €100m (US\$105m, £85m) project on the German island of Sylt. Ingenhoven will also be the architect for the site, which is planned to open at the end of 2020.

Lanserhof has also recently added the Greyscott Hall spa in the UK to its portfolio.

INTERVIEW

A photograph of Enzo Enea, a Swiss landscape architect, sitting at a desk. He is wearing a light blue button-down shirt and glasses. He is looking directly at the camera with a neutral expression. His hands are resting on a large architectural plan spread out on the desk. In the background, there are several framed images or models of landscape designs, including a house with a garden and a site plan. The lighting is soft and even.

ENZO ENEA

Swiss landscape architect, Enzo Enea, has designed more than 1,000 gardens for hotels, spas and museums, as well as privately for the Queen of Bahrain and Prince Charles. He talks to Kath Hudson about saving trees, creating outdoor rooms and working with Zaha Hadid



Sociology and functionality are the two most important aspects when we design – how an individual lives and interacts



Enea is responsible for the landscaping at the Genesis resort in Beijing. A Bulgari Hotel has just opened there

What inspired you to become a landscape architect?

My love of nature began as a child, when I spent summers at my grandfather's farm in Italy. I used to help him build stone fountains for the garden, which was the start of a life-long appreciation for craftwork and high quality materials. My father went into stone masonry work, and I took over his garden ornament business before becoming a landscape architect.

What do you enjoy most about your job?

It's a beautiful life: for me it's not working, just living! I love working in diverse climate zones and facing new challenges. We might be building a new pond, working within an existing river ecosystem or bringing greenery to a city.

What is your signature approach to landscape architecture?

I create rooms outdoors to use and live in as well as enhancing the microclimate and complementing the surrounding architecture. The architecture is like the handwriting of the architect, and it's important for me to read the site and integrate the outdoor space with the building.

The site tells you what to do. Sometimes it's about creating a filter with trees to reduce pollution; sometimes it's a filter for privacy from the neighbours. Sometimes filters aren't required

at all because it's the open countryside, so other things are needed like the creation of ha-has or opening up or framing views of the surroundings. Sociology and functionality are the two most important aspects when we design – how an individual lives and interacts.

You have created the world's only Tree Museum. How did you start collecting trees?

I started saving trees which were being cut down on construction sites about 20 years ago, and it became a passion of mine. It is very difficult to transplant mature trees. They need to be trimmed properly and irrigated immediately; otherwise they'll die. Transporting these trees is also difficult; sometimes we have to use helicopters.

We found land at a convent by Lake Zurich to house the collection, and now the museum is open to the public, welcoming 30,000 to 40,000 visitors a year. I wanted to show people what a tree really is and help them to understand what trees mean to us. At the museum, trees are appreciated as objects; each tree is set against a block of sandstone, and the space is complemented by contemporary sculptures by renowned artists. The museum combines landscape, botany, art, architecture and design. We add two or three trees a year; each has its own unique story, and I love them all.



The Enea Tree Museum near Lake Zurich features 50 trees complemented by varied sculptures




Each tree is set against a block of sandstone, and the space is complemented by contemporary sculptures by renowned artists



The museum includes sculptures by artists including Jaume Plensa

ABOUT ENZO ENEA

- After training as an industrial designer, Enzo Enea studied landscape architecture in London and then travelled to Brazil and Hawaii where he designed his first major landscape project for a Sheraton hotel
- Enea has received numerous gold and silver awards at the Giardina show in Basel and Zurich, and in 1998 he was the winner of the newcomer award at the Chelsea Flower Show
- Enea has a team of 250 employees which incorporates all the skills needed to plan and build a garden, including carpenters, gardeners, landscape architects, stonemasons and metal-workers
- Projects underway include: The Peninsula Hotel in Istanbul; Fasano Shore Club, Miami; the Zaha Hadid-designed One Thousand Museum, Miami; Bulgari Hotel Tokyo; Park Grove in Miami; the Genesis resort in Beijing; and Oaks Prague, a five star boutique hotel designed by Richard Meier in Prague



Enea has offices in New York, Zurich, Miami and Rapperswil-Jona, Switzerland

You're currently working on the One Thousand Museum in Miami, what was your approach?

This is a very interesting project with the gardens facing very futuristic architecture by Zaha Hadid. It was also important to integrate the site with the museum and Miami Bay. We are using mangrove trees, coconut palms and grasses to create outdoor rooms which have a feeling of privacy as well as a sense of escape. The building has lots of glass which gives back heat, so we are integrating canopies of trees to provide shade.

It was exciting working with Zaha. She was very interesting, and I was proud to work with such a great architect on one of her last projects. The One Thousand Museum is going to be a very compelling project.

Tell us about the Fasano Shore Club in Miami

We have worked with the Brazilian architect, Isay Weinfeld, on this project, which is an update of the beachfront property in the re-emerging historic district of Miami Beach with the creation of 75 luxury apartments and hotel suites, a fitness centre, spa, restaurants and beachside pools with cabanas.

There is an existing beautiful old pool, and we have plans to build an additional 70m pool which will be divided so that every person has the feeling of being in their own, private pool.



Zaha Hadid designed the One Thousand Museum

Natural palms will surround it and frame the architecture of the pavilion. There will be different scales and heights within the landscape. Trees are being used to create privacy within a very tropical environment along with various palm trees, mangroves and lush underplanting. It will give the feeling of air and space with clearly-defined outside rooms.



Enea worked with architect Christoph Ingenhoven on the Lanserhof Tegernsee project

How did you approach the Lanserhof Tegernsee medical spa project?

This was a challenging project. We needed to meet the functional needs of a multiple award-winning medical spa and integrate the spa within the beautiful landscape of the Tegernsee mountains in Germany and with Christoph Ingenhoven's architecture, while linking the site with the nearby golf course and golf hotel. [See interview with Christoph Ingenhoven on p80].

Central to our design is the lush atrium, designed with a combination of yew hedges shaped like waves, large Scotch pines and lots of high grasses which give privacy to the treatment rooms as well as tie the site with the surrounding landscape. We used pines, oaks, yews, beech trees, grasses and hydrangeas. We wanted to use as little planting materials as possible so that we didn't detract from the view; the planting was just to provide a frame and a microclimate. We created a Zen-like atmosphere where guests can enjoy the serene outdoor environment. As we also helped in choosing the materials for the spa, there's a real integration between the outdoors and interior.

The client chose a strong architect, and he chose us because of our understanding of places. They believed we could work well together and create a unique atmosphere reflecting the beautiful environment of the German Alps. It was a challenging project because we planned and built in 18 months, but we're very proud of the building and environment which we helped to create. It is an interesting integration of landscape and architecture. The spa is 99 percent booked all year-round, and guests from all over the world are enjoying our architecture.



The Bulgari Hotel Beijing opened in September (below), part of the wider Genesis complex (above)





What is the Genesis resort and when will it open?

This is a new urban resort in Beijing. The first phase opened last year, the hotel opened in September 2017 and the museum will open in 2018. This new complex is set to create a new way of living: all about interacting with art, nature and architecture, which is a new concept in China. We wanted to stay true to our client's idea of developing a holistic project which would touch and transform society through art, design and, most importantly, nature – all beliefs we share in our daily practice as landscape architects.

Three different types of architecture have been used for the office towers, the Bulgari Hotel and the Genesis Art Foundation, designed by Tadao Ando. In the same fashion, the outdoor spaces were carefully designed to enhance the experiences of each one of the programmes, including the public realm with the riverside promenade and amphitheater.

KPF designed the office towers, Antonio Citterio Patricia Viel designed the Bulgari Hotel, and we had the task of bringing this all together by embracing and interacting with

the three diverse buildings and creating privacy where the client or program required it.

The landscape architecture was inspired by traditional Chinese gardens and the contemporary Italian architecture of the hotel. There were many challenges and restrictions, so we couldn't create a very dense forest because there wasn't enough space, but we obtained permission to transplant mature pine trees from the forest and to build up a raft of trees with winding and sculptural shapes in order to give the sensation of usable, outdoor rooms to read, speak, drink tea and socialise in. These native pine trees have become living sculptures that tie the entire complex together.

I wanted to stay true to the idea of developing a holistic project which could incorporate art, design and nature, and of bringing these different types of architecture together in one park. I'm really proud of how people are using it – it's buzzing from morning until night. People meet at the library, go to the park and attend speeches about art and culture. It's a cultural project which really works and will improve the quality of life. ●

Enjoy your wellness experience





Cross Personal
Designed by Antonio Citterio

PERSONAL LINE heralds the day of a more personal and connected wellness experience thanks to the new tablet-like UNITY™ console. CROSS PERSONAL, the new generation of total body training.

Step into the future, visit www.technogym.com/personal



The Wellness Company

LIVING WELL

A backlash against suburban sprawl, an interest in healthier living and plenty of land have fuelled a growing demand for wellness communities in the US. Jane Kitchen investigates

Around the world, wellness communities are on the rise, with real estate firms, investors and the public seeing the benefits of creating and living in areas dedicated to health. Perhaps nowhere are there quite as many in development – and in existence – as in the US.

A combination of entrepreneurial spirit, an abundance of land, an unhealthy population, and a failing healthcare system have all contributed to this burgeoning industry.

The anti-sprawl

The US is a massive country, with a network of roads and parking lots rather than rails and trails. As populations have migrated to cities, a race for housing development has meant that countryside and farmland is fast disappearing. Many of the first American wellness communities sprang from a need to protect cherished land.

"It's important to remember that the US has been the epicentre of terrible car-dependent suburban



If you look at the amount of money we spend on healthcare in the US, and the amount of disease, we have you'll understand why a lot of folks are starting to look for alternatives

Steve Nygren, Founder, Serenbe

sprawl for the past 75-plus years, and especially in the past 20 to 30 years," says Katherine Johnston, senior research fellow at the Global Wellness Institute. "This includes poorly designed, unwalkable suburbs and exurbs; insanely long commutes on congested highways; big-box stores and strip malls; cheap, low-quality, or cookie-cutter housing construction; and poor zoning policies.

"As people in America have started to recognise how unhealthy this kind of development is for both people and planet, there's a growing impetus to try to build things that are better, and to experiment with new types of building."

Finding healthy connections

With more than two in three adults in the US overweight or obese, finding new ways to be healthy is a top priority for many Americans.

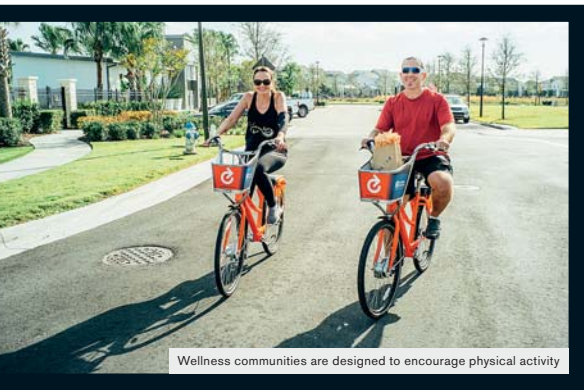
"We're pretty sick in America," says Steve Nygren, founder of Serenbe, a wellness community just outside Atlanta, Georgia. "If you look at the amount of money we spend on healthcare in the US, and the amount of disease we have – most of which is preventable – you'll understand why a lot of folks are starting to look for alternatives."

There's also a growing awareness of the benefits of intergenerational living, while the American senior living communities leave much to be desired. Couple this with an ageing and financially flush baby boomer population, and it's no wonder that the demand for wellness communities is growing dramatically.

A new kind of lifestyle

Finding connections – whether it's through community activities, spending time in nature or intergenerational living – is something wellness communities aim to nourish. And that's becoming more appealing to developers. "The golf course no longer constitutes a lifestyle," says Brooke Warrick, president of market research firm American Lives.

"As the world gets crazier – especially in the US lately – the idea of the sanctuary home and the sanctuary community becomes more important."



Wellness communities are designed to encourage physical activity



Work is underway on the wellness-themed Mado Hamlet, which will feature a destination spa

Serenbe

NEAR ATLANTA, GEORGIA

OPEN: in phases, from 2005

MASTERPLANNER: Dr Phillip Tabb, professor of architecture, Texas A&M University

Serenbe broke ground on its first house in 2004, and today, the community is home to more than 400 people. Each of Serenbe's four hamlets has a different centre focused on the elements of a well life: arts,

agriculture, health and education.

"Wellness has so many components, and that's what we're trying to talk about and help people understand," says founder Steve Nygren. "We want to bring wellness into a lifestyle that's part of everyday life."

The community features a strong connection to nature, with miles of trails connecting homes and restaurants with arts and businesses, an edible landscape, an on-site labyrinth and acres of preserved forests and meadows – all with homes specifically designed for community living.

"Serenbe reflects many traditional values and its character is southern vernacular, yet it expresses a progressive nature with its interactions with the landscape, health and wellness and sustainability," says Dr Phillip Tabb, professor of architecture at Texas A&M and the development's masterplanner. "It has an extraordinary sense of community, due in part to the founders' vision, the masterplan and the residents' style of living."



Professor Phillip Tabb created Serenbe's masterplan

Clustered housing preserves 70 per cent of the 65,000 acres that makes up the community. Edible landscapes dot the agriculture hamlet, while the art hamlet features a rich programme of art, theatre and film.

Nygren describes the wellbeing hamlet as "an entire village of vitality," and plans are underway for a major destination spa of around 30,000sq ft (2,787sq m) with Scandinavian inspired design, alongside a new boutique hotel.

"What we're doing is far more than a spa – we're creating a village of wellness, and a spa will be a component of that," says Nygren.

The urbanised portions of Serenbe make up 30 per cent of the land, leaving 70 per cent for open space



The community is being developed on a 62-acre plot of land next to Glen Ivy Hot Springs



GOCO Retreat Temescal Valley

CORONA, CALIFORNIA

OPENING: 2019

DESIGN: Martin Palleros, Tierra Design & Josephine Leung, GOCO Design Studio

GOCO Hospitality is developing a wellness community next to Glen Ivy Hot Springs in California, which it acquired last year. Designed by Bangkok-based Tierra Design and GOCO Design Studio, GOCO Retreat Temescal Valley will include 110 residential villas, along with 90 branded residences and town-homes, a wellness hotel with 60-70 bedrooms and a boutique hotel.

A full-service wellness centre will be on-site with 30 to 40 treatment rooms, thermal experiences and hot springs bathing. Additionally, there will be a medi-spa, fitness centre, yoga and mind/body studios, meeting rooms, a wedding chapel, community village, farmer's market, kids' club, an organic farm, and a hospitality academy and training centre. Walking trails will run throughout the property.

Wellness programmes will be offered, with a full-service retreat with doctors and specialist consultants on arrival, a variety of treatments, fitness activities and learning workshops. The lifestyle hotel will include green design with sustainable features, common spaces including a main lobby 'living room', co-working space and central living room and library. A health restaurant will

include communal dining spaces and organic wine and cheese, and an organic supermarket will also have a cooking school.

A wellness restaurant, tea lounge and juice bar will offer farm-to-table cuisine, and a series of events will help create a sense of community. Space will be available for artists' residences and galleries, as well as a learning centre for art, painting and dance classes.



Perkins Eastman's masterplan will transform Rochester's downtown skyline and streetscape

Destination Medical Center

ROCHESTER, MINNESOTA

OPENING: Ongoing, 2014 - 2034

MASTERPLANNER: Perkins Eastman

ARCHITECT, PHASE 1 DISCOVERY

SQUARE: HOK & RSP

Destination Medical Center is a US\$5.6bn, 20-year economic development initiative that aims to make the entire city of Rochester, Minnesota, a global destination for health and wellness.

The project will see the expansion of the world-renowned medical centre, the Mayo Clinic, and will also provide healthy community features for both local residents and the clinic's patients and visitors. Public investment of US\$585m will help develop housing in downtown Rochester, near Mayo Clinic, as well as health and wellness activities. The Discovery Square area borrows from Mayo Clinic's integrated care model to create an integrated district founded in the principles of translational medicine, and aims to position Rochester as the "Silicon Valley of Medicine", bringing doctors and researchers together and driving job growth.



Homes are designed in pocket neighbourhoods around allotments, green spaces and landscaping



Nearly $\frac{3}{4}$ of households reported improved physical or mental wellbeing

Pooran Desai, Bioregional

Grow

SEATTLE, WASHINGTON

OPENING: Ongoing, from 2014

ARCHITECTS: Various including Davis Studio Architecture + Design & Cutler Anderson Architects

Located on Bainbridge Island, a 35-minute ferry ride from downtown Seattle, Washington, the Grow community is being developed in partnership with Bioregional with a sustainability action plan and a goal of community connection, smaller carbon footprints and increased health and wellbeing. A total of 142 homes are being built in three phases; phase one is complete, and work is underway on phase two. The emphasis is on creating a compact, neighbourly community with shared green spaces, and essential services and facilities located within a short walk or cycle ride of all the homes.

Asani Development led the project, and partnered with architects including Davis Studio Architecture + Design LLC and Cutler Anderson Architects. When it's fully

developed, Grow will provide more than 50 per cent of open space, including myriad garden options. The development goal is also to create a space for intergenerational living, appealing to people of all ages and life stages, so a variety of unit types and sizes are available.

The first phase of Grow was completed in 2014. In the first three years, residents reported an 85 per cent increase in walking and a 30 per cent increase in cycling, and 65 per cent of residents participated in communal gardening. Three-quarters of households reported improved physical or mental wellbeing compared to where they lived before.

"It's very exciting to see how influential a small project can be when the developer embraces the goal of enabling sustainable living," says Pooran Desai, co-founder of Bioregional.



Grow features a variety of different garden options, with the aim of encouraging community interaction



Olivette

ASHEVILLE, NORTH CAROLINA

OPENING: Through 2027

ARCHITECTS: Various including Carlton Edwards, BCA Architecture and Michael McDonough Architects

Between 300 and 350 homes are being built along the French Broad River near Asheville, North Carolina, over the next 10 years, to create a wellness community described as an "agrihood in the making". Olivette will be set on 346 acres in the Blue Ridge Mountains, and will focus on connections to food, nature and the arts.

An on-site organic farm will re-localise food production and the farm will be scaled so it can feed 175 families. The community will also feature edible gardens, orchards, bee hives and edible landscaping.



Humanity is truly at a crossroads that requires us to find new ways of living and interacting

Allison Smith, Olivette

"New models of sustainable development are needed," says Allison Smith, director of sales for the Olivette development.

"Humanity is truly at a crossroads that requires us to find new ways of living and interacting with the environment - and each other - to create a more sustainable, peaceful, open and connected world."

Olivette also features hiking trails and an eight-acre park. Stringent energy efficiency is required in all new home construction, with subsidised geothermal heating and cooling for every house in the first phase.

Features include hiking trails, community gardens, a pavilion and fire circle amphitheatre



The physical environment in which people live has an enormous impact on their health

Ingo Schweder, CEO, Goco Hospitality

GOCO Retreat Dawson Lake

WEST VIRGINIA

OPENING: Unconfirmed

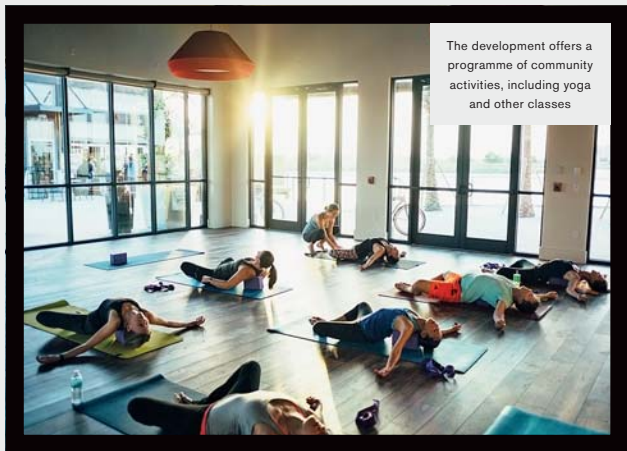
DESIGN: Martin Palleros, Tierra Design, and Josephine Leung, GOCO Design Studio

GOCO Hospitality is in the process of working on a GOCO Retreat across 750 acres (304 hectares) in the West Virginia countryside, not far from Washington, DC. The project focuses heavily on the area's natural mineral springs, and will include both a 70-bedroom wellness hotel and 150 residences - all houses.

"Our GOCO Retreats not only offers guests extensive wellness programming and activities, but also provide them with a retreat from

their everyday environment, allowing them to heal and reconnect with nature," says Ingo Schweder, CEO.

A 4,000sq m (43,056sq ft) spa will include mineral springs bathing. Other wellness activities, including canoeing, hiking, biking, and horseback riding, will be incorporated in the retreat. Schweder said he is also in talks with a DC sustainable think tank to be anchored to the retreat, and that he expects the location to be a space for politicians to escape for off-site meetings.



The development offers a programme of community activities, including yoga and other classes



The project will give us an opportunity to gain new insights into the effects of lifestyle on health and wellbeing that can help future generations

Gloria Caulfield,
The Lake Nona Institute

Lake Nona

ORLANDO, FLORIDA

OPENING: Ongoing, from 2000

ARCHITECTS: Various including Perkins + Will, Cooper Carry & HKS

Lake Nona, in the city of Orlando, Florida, is a community masterplanned by global investment organisation The Tavistock Group. The 17-square-mile development is a "living lab," designed around clusters of innovation and excellence in the areas of health and wellbeing, sports and human performance, technology and education.

The design incorporates trails, bike sharing, green space, community programmes, yoga and group activities. Wellness and social connectivity are a key focus. The population has grown from 500 people in 2000 to 12,000 in 2015, with estimates forecasting 40,000 by 2020.

The community is home to the Lake Nona Institute, a nonprofit organisation which aims to inspire healthy, sustainable communities, as well as the Johnson & Johnson Human Performance Institute, where executives and athletes learn how to improve their health, energy levels and mental

sharpness. A health and wellness study, the Lake Nona Life Project, aims to better understand how communities work and the factors that lead to better overall health.

"The Lake Nona Life Project will give us an unprecedented opportunity to gain new insights into the effects of lifestyle on health and wellbeing that can help future generations," says Gloria Caulfield, executive director of health and wellness for the Lake Nona Institute.

Lake Nona is also home to a 650-acre health and life sciences cluster that includes the Sanford Burnham Prebys Medical Discovery Institute, and the US Tennis Association (USTA) opened its national campus at Lake Nona in January.

As the project develops, Lake Nona anticipates adding a medically integrated fitness centre, as well as a resort with a 45,000sq ft (4,181sq m) spa and fitness campus.

Spa consultancy WTS International has worked on the market analysis, strategic planning, programming



and financial analysis for the upcoming Lake Nona Spa.

Details are still being kept under wraps, but Kim Matheson, senior vice president at WTS, says it will include in-depth indoor and outdoor programming for all ages and levels on a "massive scope."

"It will be a unique journey to being well and active at work, home or play," says Matheson. "This will be a spa and wellness concept without borders." ●

The hotels at Lake Nona feature Delos Stay Well™ rooms, designed to promote sleep and wellbeing

“

I want to create things that show my love, my respect, my interest in the world

Marcel Wanders

The multi-disciplinary Dutch designer tells Kim Megson why he rejects minimalism and embraces chaos

In 1996, Marcel Wanders started life as a designer of furniture, lighting and tableware, before entering the world of interior design in the early 2000s. These days, he and designer Gabriele Chiave lead a multidisciplinary team of 40 from their studio in Amsterdam, developing their fantastical design philosophy that replaces “the coldness of industrialism with the poetry, fantasy and romance of different ages.”

Collaborating with the likes of Morgans Hotel Group, Park Hyatt, YOO, Christofle, Swarovski and Louis Vuitton, Wanders has worked on everything from five-star hotels to shop fronts, chandeliers, tables, new types of cladding and even air pollution masks. Here he speaks to *CLAD* about his career and singular approach to design.

How did you transition from product to interior design?


It goes back to 2001. I was working on product designs and I felt that in order to up my game and add complexity to my life I had to widen my perspective. The two fields felt connected, so it seemed logical. I made the decision, then three weeks later I had two projects out the blue: the VIP lounge of the National Dutch Pavilion in Hannover, and then a store for [fashion brand] Mandarin Duck. Shortly afterwards, I started work

on the Lute Suites – a super mini hotel – in Amsterdam. I fell into the world of interior design in an instant and had to find a way to quickly understand it as much as I could.

What characteristics of product design do you bring to your interior work?

I soon found out they're very different. As I was drawing, I realised that if I designed interiors in the same way I designed products, they'd be super boring. My ideas at that time about product design were very conceptual, meaning I was looking for a great idea, and I followed that one idea until it was expressed in the best way possible. It's like sculpting from a piece of marble: You know what's inside and you carve out everything that you don't need, and then you keep this extremely perfect one thing.

With interior design, the rules are different. A product needs one idea, but an interior needs 1,000 ideas that all speak to each other and intertwine. That's not to say interiors always take more time and energy than products. With an interior, the client usually already has a house and they want the inside finished quickly. Maybe they don't like your solution, but they'll say, 'let's change it a bit', not, 'let's scrap it'. With product design, if the client doesn't like it, you have to start from scratch. It can take longer to make sense of an object too – designing a teapot can be more difficult than designing a house.

A portrait of Marcel Wanders, a man with grey hair and a goatee, wearing a dark suit jacket over a white shirt and a colorful beaded necklace. He is leaning against a dark, reflective surface. The background is a white wall with a complex, geometric, faceted pattern. A text box in the upper right corner contains the following text:

Marcel Wanders leads a multidisciplinary team of 40. The studio is based in Amsterdam



“ As a designer you have the gift of really being able to add fun and value to people’s lives ”

What did you learn on the Lute Suites project?

I was a co-investor, so I learnt from both client and design perspectives. We had seven guest rooms connected to a large restaurant and a reception – that was it. Because I never look for short-cuts, we did seven completely different room designs. Everything was constantly redesigned, redesigned, redesigned, even as we were doing the final instalments.

It was a fantastic learning curve, and our calling card. Normally a young design studio will design a uniform hotel room and have maybe four nice photos showing it. We had seven unique rooms, each of them magical places, so we could make 20 photos for each. We sent so much material out, it looked like we were the biggest studio in the world. After that, we were asked by Morgans Hotel Group to redesign the Mondrian in Miami for them.

What is your starting point when designing an interior?

I think the physical design of a space comes quite late in the process. The first thing you build is the proposition. What is the idea? How can you bring the unexpected to people’s lives? Maybe you want to eat cupcakes on a skating rink, or put a barbers for guys in a bright pink room. People will always have to eat, they have to get their hair cut, they have to go shopping

– but they can choose whether they do these things in a boring place or an exciting place. As a designer, you have the gift of being able to really add fun and value to people’s lives.

What’s the biggest challenge of hotel design?

A lot of things can happen in the five years it might take to build a hotel. You work with so many different specialists – architects, engineers, consultants – and you have to all agree how to make something amazing. Then, just before everything is finalised, suddenly the hotel can get sold to another group of people, and everything changes.

It’s also a challenge to keep everyone motivated. You need that faith because this is a business where for five years there are no revenues, only expenses, and then, after opening, the hotel needs to start making money quickly.

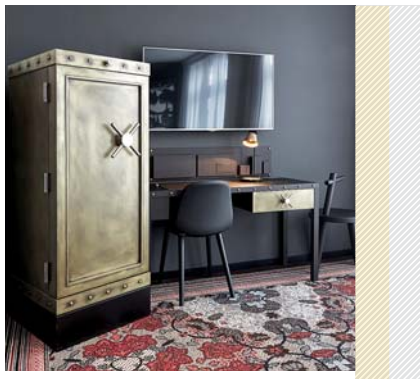
You’ve spoken about your dislike of minimalism. Can you explain why you don’t like it?

If you love design enough to give your life to it – studying for years and flying to jobs and events around the world – then why would you try to design as little as possible?

When I think about how and why I want to do my work, I think about this metaphor. My daughter is eight years old, and I have to make her a gift because I love her. So what am I going

Mondrian Doha / 2017

The famous Middle Eastern folk tales of One Thousand and One Nights are the inspiration behind a lavish dome-topped hotel in Doha. Design features are inspired by local patterns, ornate Arabic writing and historic souks. The public spaces include an entertainment floor with a nightclub, rooftop pool and skybar, and a huge wedding ballroom, in which brides can enter via a 24-karat gold sculpted cage elevator.



Kameha Grand Zurich / 2015

The five-star Kameha Grand Zurich is an LH&E Group hotel that celebrates the rich heritage of Switzerland. In the lobby, guests are greeted by a matelassé white wall covered with golden hotel keys, rugs with Guilloches-inspired drawings, a grand staircase and a monumental handcrafted cow bell lamp. The 245 rooms and 12 themed suites are appointed with Swiss-inspired chocolate-patterned wall panelling, minibars fashioned as bank vaults and Toblerone-shaped sofas.



Grand Hotel Portal Nous / 2017

Nestled on a Mallorcan beach, the luxury Iberostar hotel has been designed with "transparency, whites and reflective surfaces to create a flow of openness" and to emphasise the spectacular scenery. There are 66 rooms, four penthouse suites, five themed suites and an eye-catching gym and spa, with a secret garden and a cascading pool outside.

“ A lamp can be disguised as a horse. Why not? ”

to do? I can follow the idea of minimalism, and get a small box which has crepe paper on it and I tell her 'Darling, this is for you, it's very lightweight, it was easy to produce without too much extra cost, and it's available all over the world, so you got one. Be happy'. If I do that, she'd sit in the corner of the room crying, certain that I don't love her any more.

Instead, I find the most amazing paper that I can – it might have some twinkling bells on it, or it might have a fairy with a machine gun, because she likes to be a bit wicked. I put a bow and some flowers on it and I stand up and do a little performance. I tell her it's the most amazing gift and I went to great lengths to find it for her, because I love her.

That's how I design. I want to create things that show my love, my respect, my interest in the world, my understanding of human behaviour. In my studio, we have a saying: 'We always want to give more than people expect'.

Is there much crossover between the role of the architect and the interior designer?

I don't like to criticise anyone, and I think architecture is a great profession, but I do think architects have given away a bit too much. Two hundred years ago, when an architect did the building, they did the door, they did the doormat, they made the bell, they did the stairs. I think today they do a façade and

maybe a floor plan, but that's it. Many have decided that the interior is irrelevant. Glass windows and concrete floors are the perfect example of the modernist ambition. That has left space for the birth of interior design, because people cannot live in a house which doesn't have a feeling of warmth and love.

Can you explain the importance of surrealism and fantasy in your work?

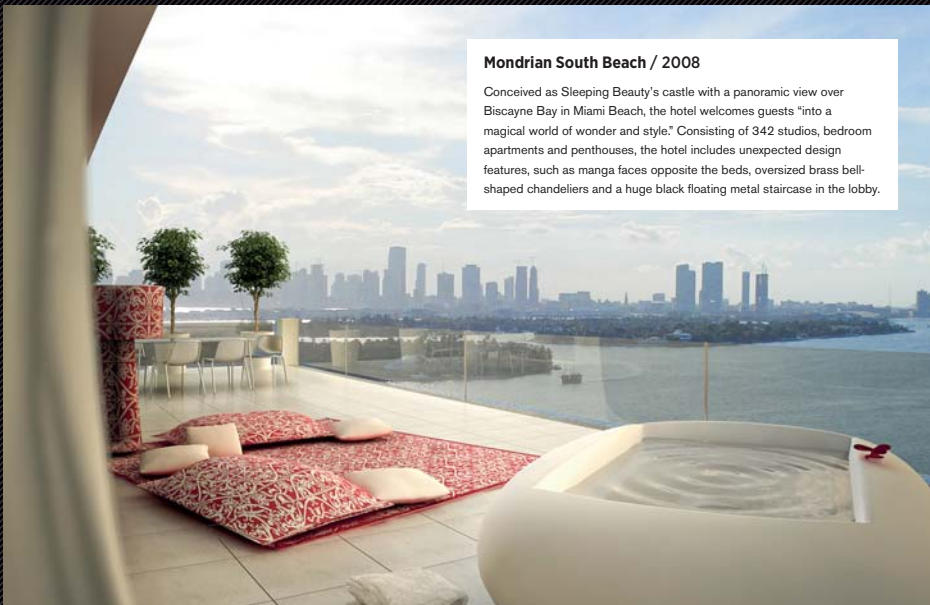
As a designer you have a tool box, and the tools you have to play with include size, scale, materials, colour, historical context. There are limitless opportunities to bring these together to make a really different design. I think modernism has decided that a lot of these tools are superfluous and shouldn't be touched. They say a space must be honest; you cannot lie about what it is. That's ridiculous, because lying is one of the most beautiful parts of the tool box. You can make something look like something it is not. A lamp can be disguised as a horse! Why not?

I love the fact that we allow ourselves to lie about an object, or to play with the way your ears get information, your nose gets information, your heart gets information. A lot of projects you find around the world are dead-ish.

We embrace chaos, because we love people to stroll around our hotels and think, "Wow, I have to come back here later because I'm going to feel something different".

Mondrian South Beach / 2008

Conceived as Sleeping Beauty's castle with a panoramic view over Biscayne Bay in Miami Beach, the hotel welcomes guests "into a magical world of wonder and style." Consisting of 342 studios, bedroom apartments and penthouses, the hotel includes unexpected design features, such as manga faces opposite the beds, oversized brass bell-shaped chandeliers and a huge black floating metal staircase in the lobby.



Andaz Amsterdam Prinsengracht / 2012

The studio transformed a former public library building in the heart of the Dutch capital into a five-star boutique hotel of 122 rooms and five suites for Hyatt Hotels. The design scheme and choices of furniture reference the Dutch Golden Age and Delft ceramics. Elements include oversized bells, passion red Tulip Chairs, carpets and walls showing ancient nautical maps and a romantic secret garden.

“ I have a few years to live yet, I want to do more than people expect, and I can't do it on my own ”

You have worked for hotels across the world. How important is creating a sense of location?

If I make a chair, it has to adapt to numerous situations. If you have a hotel, it has to reflect exactly where it is. If a guest from New York flies to Doha, when they're in the room they want to feel they are in Doha. They don't want to feel they're in New York. That's an interesting challenge, because you have to find authenticity, but yet you're not making a truly authentic work because it should also be new and unique.

To find the balance, you have to tap into the atmosphere, the culture, the colours, the ideas of the place. You have to love the people, talk to them, read what they read, breathe the air that they breathe, eat with them and understand them.

Some of your clients have been sheikhs. What have those relationships been like?

I travelled in the Middle East for the first time maybe 12 years ago, with Sheikh Majid from Kuwait, and we were together

for two weeks. We saw a lot of his friends, who of course are all super important people in the region, and I was happily surprised and humbled by them. The ones I've met have a true interest in others and a true interest in doing projects that add value. More than anything else, they're not trying to hide their ambition. That's the one thing I think we have little of in the West, whereas they have a huge amount of it. They don't want to do something unless it's exceptional.

Do you think then that investors are too conservative in Europe?

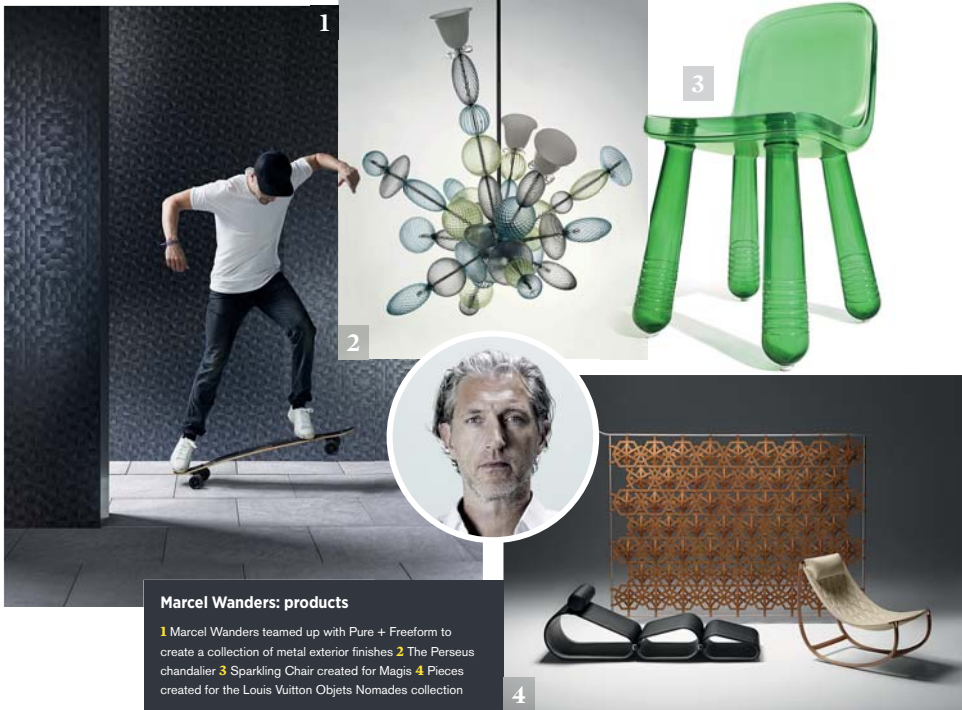
It's not my rule in life to critique other people, it really isn't. But I'll say that I'm super happy when I find people who have true ambition, because it's helpful for me. I have a few years to live yet, I want to do something more than people expect, and I can't do it on my own. I need a group of people around me with the same urge to make their presence count. That's something I've always felt working in the Middle East. They



Lute Suites / 2005

Across seven individual 18th century cottages, Wanders created home-like settings complete with modern and classical décor. Bespoke objects and furniture made each suite unique and were designed to offer guests "a more personal and meaningful experience."





Marcel Wanders: products

1 Marcel Wanders teamed up with Pure + Freeform to create a collection of metal exterior finishes 2 The Perseus chandelier 3 Sparkling Chair created for Magis 4 Pieces created for the Louis Vuitton Objets Nomades collection

have their own difficulties, don't get me wrong, but I love the amount of ambition that energises the region.

Have you ever thought about rebranding to reflect the collective nature of your practice?

Not rebranding, but I like to emphasise the importance of the team. I say 'I am not Marcel Wanders, we are Marcel Wanders.' Marcel Wanders is a group of people that work for the creation of a more interesting world. Your mindset as a designer changes as soon as there is a second person who works with you, because you have to explain to them 'this is how we do it, and this is how we think it should be done.' Of course that evolves, and the more people join you, the more you start defining your own personality in a collaborative way.

Do you have a favourite hotel?

I'll always go out of my way to stay in the Oberoi Amarvilas in Agra, India. It's an incredible experience. A beautiful hotel with impeccable service, without being super stuff. The attention to detail there is from a different world.

And a favourite city?

Tokyo. Their Shinto religion, which is super fundamental to everything that happens in Japan, holds that every object has a personality and deserves respect. That's how Japanese people make their things – from a manhole in the street to a poster or some packaging. So Shinto is very near to the religion of design. A designer hopes to give the world objects and spaces that truly have character and personality and are loved by their maker. When I walk around Tokyo, I see that love everywhere.

How would you sum up your design philosophy?

I believe that it's my task to connect with my audience. I exclude no-one. There are visual people, there are auditory people, there are kinaesthetic people, there are spiritual people, there are no completely rational people.

All people use a different mix of these sensors to become informed about the world. So I challenge myself to be a connoisseur of all these areas and to be inspiring in all these areas. I steer my path diligently, yet am open to change. ●

THEATRE DESIGN

5 KEY TRENDS

With the 2017 World Architecture Festival celebrating 'Performance' as its theme, **Kim Megson** delves into the innovative world of theatre design, with the help of Charcoalblue founder **Andy Hayles**

Andy Hayles has worked in the world of theatre consultancy and design for the best part of two decades, and was a theatre electrician and lighting designer before that.

He co-founded theatre design and consultancy practice Charcoalblue in 2004, and the studio has gone on to work on some of the world's most famed and acclaimed theatres: from the Royal Shakespeare Theatre redevelopment in Stratford-upon-Avon to the Stirling Prize-winning Everyman and Playhouse in Liverpool and the Young Vic in London.

"My mum still struggles to understand what I do," Hayles admits to CLAD with a laugh. "I tell her, 'I design spaces where maybe 1,000 people go to watch another group of people pretending to be yet other people. They're crammed into this room and seated in a tighter space than their sofa at home. Then the lights are switched off. My job is to make sure they stay awake and attentive, are comfortable and can leave the building safely if anything goes wrong. And the experience has got to be engaging enough for them to come back next week.' When you put it in those terms, it's a really odd thing to do as a career!" Charcoalblue have partnered with some of the world's



Andy Hayles

foremost architects, and forthcoming projects include the Factory in Manchester, with Rem Koolhaas and OMA, and the Perelman Performing Arts Center in New York, with Joshua Prince-Ramus and REX. While Hayles says the team "love the process of collaboration", he concedes it is usually the architect who gets the lion's share of the recognition and media coverage.

"We want to remind people that everything that happens in the auditorium starts with the actor-audience relationship," he says.

"The architects are highly involved of course, but the theatre consultant carries the joy and the burden of making that part of the theatre work. We know we'll never be the ones on the cover of the design magazines, and we don't really aspire to be, but we're really proud of what we do."

This year theatre design is set to finally emerge from the shadows. The 2017 World Architecture Festival has adopted 'Performance' as its theme, with seminars and exhibitions exploring the very best examples of theatre design.

To celebrate all things theatre, we asked Hayles to talk us through five of his most exciting emerging design trends, backed up by some CLAD case studies



Theatre specialists Charcoalblue were founded in 2004 and have offices in the UK, US and Australia

1 Renovating existing theatres

"I think we'll soon see a lot more instances of re-using existing theatre stock, not just refurbishing them but dynamically adapting them to meet what artists now require. I was at a conference recently, and a couple of theatre directors said: 'Why are we building new theatres? We just don't need them, we'd rather be putting on plays in warehouses now.' The demand for renovation and adaptive use projects is growing, particularly as it's a cheaper and more environmentally sustainable way of doing things.

"One big issue is how to get more intensive use out of the auditorium. Aside from shows and the odd rehearsal, they're wasted spaces for so much of the daytime. The National in London was quick to spot this, and we helped them adapt the auditorium of their Dorfman Theatre – creating a system where you can fold seats into the floor and elevate the rows on elevators – to create a more flexible space that can host educational classes and workshops in the daytime on a flat floor, as well as host shows at night with raked seats.

"Theatres have lots of new competition. If they don't update their facilities, which can be more than a hundred years old, they may lose."

The auditorium of the Dorfman Theatre was adapted

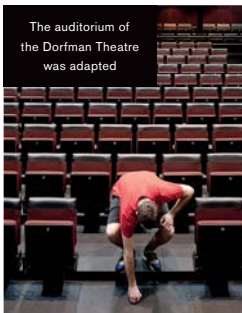


IMAGE: PHILIP VITTE

Nine huge audience seating towers can be rearranged in 12 different configurations



IMAGE: JAMES STEINKAMP PHOTOGRAPHY



IMAGE: VITO PALMBRAND

CASE STUDY 1

The Yard at Chicago Shakespeare

CHICAGO, US

Charcoalblue and Adrian Smith + Gordon Gill Architecture (AS+GG) have just completed The Yard at Chicago Shakespeare – an ambitious adaptive reuse project along the city's Navy Pier.

The duo have repurposed elements of the former Skyline Stage, constructing a fully enclosed, year-round theatre chamber beneath the pier's iconic white tent, with fewer than six inches of clearance at the narrowest point between the steel beams and the canopy. Eighteen 95ft-long (29m) micropiles were driven into the lake's bedrock below Navy Pier to support the additional weight of The Yard. The Skyline's stage house and backstage support areas were all refurbished for reuse.

Nine audience seating towers, each the size of a London double-decker bus on end, can be rearranged in 12 different configurations,

with audience capacities ranging from 150 to 850. Compressed air skid technology used in the aeronautical industry lifts each of the 15.8 tonne towers marginally off the ground on a bed of air, allowing them to be moved by a three-person team. The 33,000sq ft (3,000sq m) site is connected to Chicago Shakespeare's existing building and smaller theatre via a new two-level glass lobby.

Construction began in March 2016, and was completed in 18 months at a cost of only US\$35m (€30m, £26m) – or under half of what would have been required to build a new venue from scratch.

"The Yard's ability to adapt to the needs of the art is genuinely innovative," says Gordon Gill. "We've accomplished it in a sustainable and cost-conscious way, which I believe will make it a model for theatres to come."



Gordon Gill,
AS+GG
founding partner

2 Flexibility in the theatre

"Directors and designers love flexibility, and it's something we as theatre building designers have to think ever more about these days. But even if we present a manual of nine different pre-approved, safety certified configurations they can use, the creative team often invent a tenth we haven't come up with! Automation has its place – putting staging and seats on lifts and so on – especially where labour costs are high, but where we can we prefer a 'back

to basics' approach, because it's easier to maintain and flexibility can actually be improved by minimising heavy machinery.

"The Schaubuenehe in Berlin, refurbished in the 70s, is a cautionary example of what can go wrong with too much machinery. It was filled with elevators, winches and acoustic doors with three separate theatres that could be merged. But when you have so much machinery, you create other constraints. If you need to lift the

stage diagonally, you have to build a stage on top of the lifts, and you can't cut a hole in the floor for a trap door, because there's a lift in the way blocking the actor.

"For the Perelman Performing Arts Center in New York, we've tried to learn from our forebears.

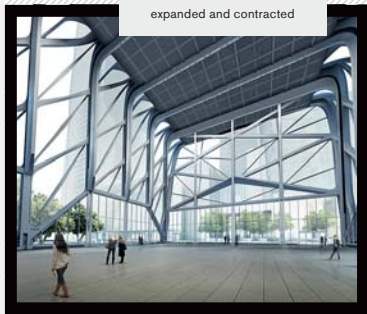
So although we need to achieve 11 configurations and merge several spaces, apart from one area of the largest theatre we've used low-tech rostra, because it's easy to assemble and move and lets you do almost everything you could need."



ROCKWELL EDWARDS



The Shed's telescoping outer shell sits on rails and can be expanded and contracted



IMAGES: DILLER SCOFIDIO + RENFRO AND ROCKWELL EDWARDS

CASE STUDY 2

The Shed

NEW YORK, US

Architecture firms Diller Scofidio + Renfro and Rockwell Group are nearing completion of an expandable cultural venue in New York's burgeoning Hudson Yards district.

The 200,000sq ft (18,500sq m) structure comprises two principal components: an eight-level fixed building, including two large scale column-free galleries and a 500-seat theatre; and a telescoping outer shell, which sits on a set of rails that allow it to be expanded and contracted.

Inspired by the Fun Palace – an unbuilt, experimental building-machine imagined by the 1960s British architect Cedric Price – The Shed will adapt to ever-changing demands over size, media and technological complexity.

"We're creating the conditions for a whole range of artists to connect with audiences in a range of ways that feels vital and alive," David Rockwell tells *CLAD*. "In theatres, flexibility has been something of a double-edged sword. Here it should



David Rockwell says flexibility has been built into The Shed's DNA

be a liberating empty stage for new works of both visual and performing arts. Who knows what the demands for these spaces will be in 15 years time? To create flexibility, we've designed a building as infrastructure.

"There are a whole series of interconnected spaces designed for simultaneous programmes. It will be a kind of urban festival in terms of the number of things that can go on at the same time. The deployable outer shell can, within five minutes, create a totally rigged 120ft tall (36.5m) light, sound and temperature controlled hall that can serve an infinite variety of needs for a standing audience of 2,700 or a seated audience of 1,250. There's also 20,000sq ft (1,800sq m) of outdoor space, so flexibility is built into the DNA of the project."



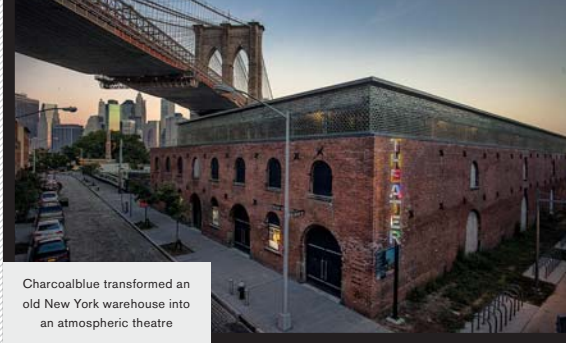
Non-profit
Bold Tendencies
commissions
cultural projects
in a multi-storey
car park

3 Theatres in found spaces

"I don't know if this trend ever went away, but it's certainly becoming increasingly popular for young theatre-makers to put on shows rough and ready, wherever they can. Any building can be a theatre – from an old warehouse to a multi-storey car park.

"As a theatre building designer working on a found space, the challenge is to listen to the building and let it talk to you. If you fight it, you can end up spending a lot of money to little effect. Why expend loads of effort trying to make the small rooms of a telephone exchange sound like a concert hall? Try a voluminous cave instead!

"The advantage of found spaces is they can become the centre of really immersive theatrical experiences. You control the whole environment, not just the scenery as you might in a more conventional space."



Charcoalblue transformed an old New York warehouse into an atmospheric theatre

IMAGE: DASTIN NELSON



IMAGE: DAVID SUNBERG/ESTO

The design team combined careful restoration with low-key architectural interventions

CASE STUDY 3

St Ann's Warehouse

NEW YORK, US

Marvel Architects worked with Charcoalblue to transform a derelict 1840s tobacco warehouse on the bank of New York's East River into an avant-garde year-round performing arts facility. Old elements were carefully restored, while low-key interventions saw the warehouse become home to a versatile theatre space with a capacity for 300-700 people; a multi-use community room; an open-air garden created within the existing brick walls; and dressing-rooms, offices and backstage facilities.

"It was a ruin without a roof, only used for the occasional market," says Charcoalblue co-founder Andy Hayles. "Then the St Ann's theatre company were moved out of their home across the street, and they took the warehouse over.

"It once had five storeys, but after the roof and top three floors fell in, it became this big empty space. We followed the rhythm of the old building, looking at what had been there before to add a few new columns. To let natural light in, we popped the new roof above

the level of the existing brick wall.

"The opening show was Phyllida Lloyd's version of Shakespeare's *Tempest* – presented as a show put on by the inmates in a women's prison. They built an exercise yard complete with wire fence, and blue plastic bucket seating. The actors marched in through the lobby in orange jumpsuits and wardens came into the bar, blowing whistles and shouting at us to take our seats. It was so immersive, and all supported in this space that the theatre didn't have to build"



Marvel Architects, led by Jonathan J. Marvel, renovated the warehouse

4 Temporary theatres

"People fall in love with temporary theatres, so much so they're having increasingly long lives.

Take London's Young Vic, which was only meant to be there for five years, but was so popular that it was renovated to become permanent. Temporary venues are often the best solution

for someone with a limited budget and the need to create something a bit different.

"For example, we built a little temporary theatre with the architects Haworth Tompkins for the National. It was just a simple 200-seat auditorium, with a grill around the bottom to let fresh

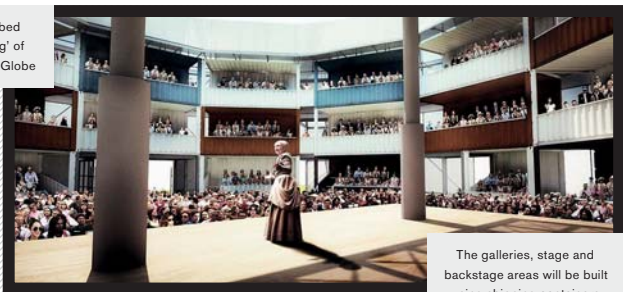
air in, four chimneys to let the hot air out, and a simple lighting rig. We wanted to have a 13 amp plug connected to the walls of the National to show how little energy is actually needed to run a space of this size.

"It cost just over £1m and was used for three years – two years

longer than planned. It's a great reminder that you don't need to spend hundreds of millions to realise a great theatre.

"If more people built with sustainability and efficiency in mind from the start, there would be more spaces for communities who need them."

The project is described as 'a punk reimagining' of Shakespeare's original Globe



The galleries, stage and backstage areas will be built using shipping containers

CASE STUDY 4

The Container Globe

DETROIT, US

Construction started in September 2017 on a close replica of William Shakespeare's famous Globe Theatre, with two key differences from the original: this version is located in Detroit and is being built entirely out of stacked shipping containers.

The Container Globe is the brainchild of entrepreneur Angus Vail, who wants to build cost-effective venues around the world to host performances of the Bard.

Architecture studios Perkins Eastman and Cost+Plus have created the design brief, which is described as "a punk reimagining" of Shakespeare's concept, while the New York office of Arup have provided consultation on the acoustics, lighting, fire safety and accessibility aspects.

The layout will closely mirror that of the original Globe Theatre, which was built in 1599 in the London borough of Southwark and reconstructed in 1997.

Designed as a theatre in the round, huge crowds could stand as close as possible to the action, with it not uncommon for spectators to leap on stage to join the scripted brawls, sword fights and moments of high drama.

Vail is seeking to mirror this electric atmosphere, "which makes the plays more accessible, and just plain more fun, for people to watch, rather than just sitting back in a dark theatre."

The galleries, stage and backstage areas will all be created using stacked and fastened shipping containers, scaffolding and other readily-available building materials, and the theatre



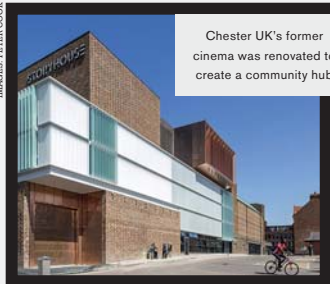
IMAGES: CONTAINER GLOBE

will have a demountable base, meaning it can either be a temporary or permanent addition to the city.

"We're fabricating the containers as we go and building the prototype on site so we can experiment, make the requisite mistakes and work towards the 'complete' Container Globe," Vail told CLAD. "We hope that as we build the real thing, donors and investors will really weigh in to make these theatres viable."



Entrepreneur Angus Vail wants to build Container Globes around the world



Chester UK's former cinema was renovated to create a community hub



5 Theatres as community spaces

"Making your theatre a lot more inclusive and accessible to the whole community is a really exciting emerging trend. Currently, most lobbies are empty in the day time. In the West End, they open half an hour before the show begins. That's wasted real estate. If you're an austerity-pressed council spending all that money, why would you want to build all those square metres of space that are hardly used?"

"We recently worked with Bennetts Associates on The Storyhouse in Chester, and their genius was to actually place the new town library in the lobby, where you can not only buy a ticket for a show when you go to borrow a book, but also have a G&T while you read the paper! There's intensive daytime use, so it's an innovative piece of value engineering. It's such a delight that if you go six hours before a show, it's really buzzing."

"We experienced a similar thing with the Young Vic. Where else can you go at eight in the morning, get a croissant and stay for the day? When it opened, one reviewer said 'this is the best bar in London, and apparently it's got a theatre attached! If all the buildings we work on got that amount of life inside all day, we'd be delighted.'"



Storyhouse is home to a library and bar, as well as a cinema and theatre

CASE STUDY 5

Storyhouse

CHESTER, UK

Chester's former Odeon cinema had been closed for over a decade when architects Bennetts Associates and Charcoalblue embarked on a design to develop the building into a multi-purpose arts centre, library and theatre able to switch between thrust and proscenium formats.

"We chose to put the theatre in new space next door and attached it to the old cinema, which we hollowed out to make a vast Art Deco space for a new cinema, library and cafe," says Simon Erridge, director at Bennetts Associates. "The theatre had to be a more complex shape, so we housed that in a new extension. The result is this very accessible 180m-long (354ft) cultural hub for the community."

"The variety of uses is important, because



Simon Erridge, director at Bennetts Associates, believes community is key

it has to be open all day if the organisation that runs it is to make enough revenue, support ticket prices and create a lively public venue for the city.

"There's no box office with a desk. You walk straight through into the library and cafe, and it feels very welcoming. There are people in T-shirts if you have a question, so there's no intimidation at the front door. You drift in and the building takes you over, like a living room for the city."

"As a model, it's unique and will likely be repeated. Storyhouse is an 18-hour a day building that's alive seven days a week. You see mothers, young kids, students, older people – it's a massively broad demographic and that demonstrates its success." ●

LIVING FOR THE MOMENT

Designing temporary architecture gives architects the freedom to experiment, be flexible and have a little fun. **Christopher DeWolf** takes a look at a few intriguing projects



After a week of miserable weather in Montreal, the sun has finally returned and the Village au Pied-du-Courant is filling up. Visitors park their bicycles and make their way past a DJ remixing West African music. They order a pastis or a plate of Haitian food and settle into a wooden cabana. Some grab a book on architecture from the small on-site library; others play pétanque or basketball. Still more climb to the top of an observation tower to gaze down at the colourful encampment that has sprung up next to the St Lawrence River, between the green iron trusses of the Jacques-Cartier Bridge and the port cranes to the east.

A month earlier, there was nothing here but a rubble-strewn space. And that's all that will be left a few months later. Though it has taken place every summer since 2015, the Village au Pied-du-Courant is designed to be ephemeral: here one

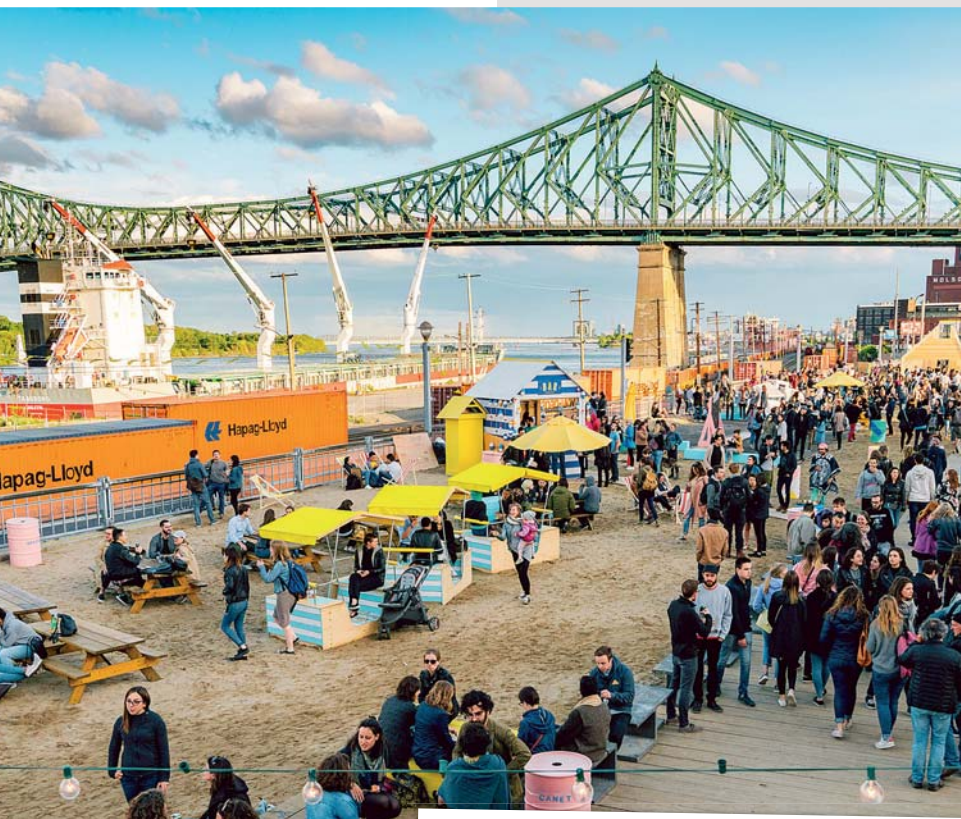
moment, gone the next. "It's a living lab where businesses and organisations can experiment with new practices in art and design, co-creation and sustainable development," says Maxim Bragoli, co-founder of La Pépinière, the design firm responsible for the village, along with dozens of similar interventions in Montreal's public spaces.

Working on a shoestring budget of government grants, La Pépinière has transformed derelict alleyways into lively markets, opened outdoor bars in the midst of Montreal's frigid winters, and turned a neglected downtown square into a lively gathering place with a pop-up bar, urban farm and market stalls. None of the projects are intended to last more than a few months. "Compared to something permanent, an ephemeral project can take place in a very short time frame and with a very small budget," says Bragoli. "Another advantage is that it's agile – once it's in place, it can be adjusted depending on the needs of its users."



The temporary Village au Pied-du-Courant (above and right). Its designer Maxim Bragoli (below)





The Village au Pied-du-Courant features basketball courts



Architecture is finally sloughing off its obsession with eternity

This is an approach taken by a growing number of architects and designers around the world. "Architecture is going pop. It is finally sloughing off its ridiculous obsession with eternity, and learning to live in and for the moment," wrote architecture critic Aaron Betsky last year.

Freed from the shackles of permanence, architects have the freedom to experiment with materials, respond quickly to urgent situations and adapt in real-time to the needs and habits of the people who use their spaces.

Some of the world's top architects use ephemeral projects as statement pieces. Every year since 2000, London's Serpentine Galleries has commissioned a summer pavilion, and the roster of architects it has chosen include Zaha Hadid, Toyo Ito, Rem Koolhaas, Peter Zumthor, Bjarke Ingels and other game-changers. This year, Burkina Faso architect Diébédo Francis Kéré designed a circular lattice structure that has indigo-blue walls and a tilted canopy that funnels rainwater into a gushing torrent in the centre of the pavilion.

Kéré says he wanted the pavilion to evoke the experience of taking shelter under a tree. "If you look up it changes wherever you turn," he said at the opening. "Maybe naively, we wanted



PHOTO: IMAH BAHAR



PHOTO: BUK AND GUNBEREK

- Diébédo Francis Kéré's said the Serpentine Pavilion commission gave him the chance to explore new ways of shaping space

you to still be connected to nature." Kéré's work channels the current spirit of architecture, which years for authenticity in the face of anonymous globalisation. It is perhaps not a coincidence that the curators of next year's Venice Biennale of Architecture, Yvonne Farrell and Shelley McNamara, have said they plan to focus on "generosity and thoughtfulness" and "a desire to engage."

Those are qualities that can be found in the work of London's Assemble Studio, which specialises in pop-up projects with a strong community impact.

In the past, Assemble have transformed an abandoned petrol station into a temporary cinema, and built an event space beneath a London flyover that took the shape of a homely brick house. Some of the studio's ongoing 'live projects' include a Glasgow junkyard playground inspired by the aphorism "better a broken bone than a broken spirit," and a project in Bristol's Leigh Woods that studies how children create their own play spaces. These kinds of temporary interventions sometimes lead to permanent solutions, like in New Addington's town square, which was renovated after Assemble used installations and events to study different configurations for the space.

For more than two decades, Japanese architect Shigeru Ban has used temporary structures to fuel his Pritzker Prize-winning practice. Ban started using recycled material in the mid-1980s, and he eventually developed paper tubes that were strong enough to use as structural supports. When he saw Rwandan refugees living in terrible conditions after the 1994 genocide, he realised the paper tubes could serve as the framework for affordable

Yvonne Farrell and Shelley McNamara chose 'freespace' as the theme of the 2018 Venice Biennale



PHOTO BY ANDREA ARZUFFI/COURTESY OF LA BIENNALE DI VENEZIA

Assemble's Folly for a Flyover transformed a London motorway undercroft into a temporary arts venue

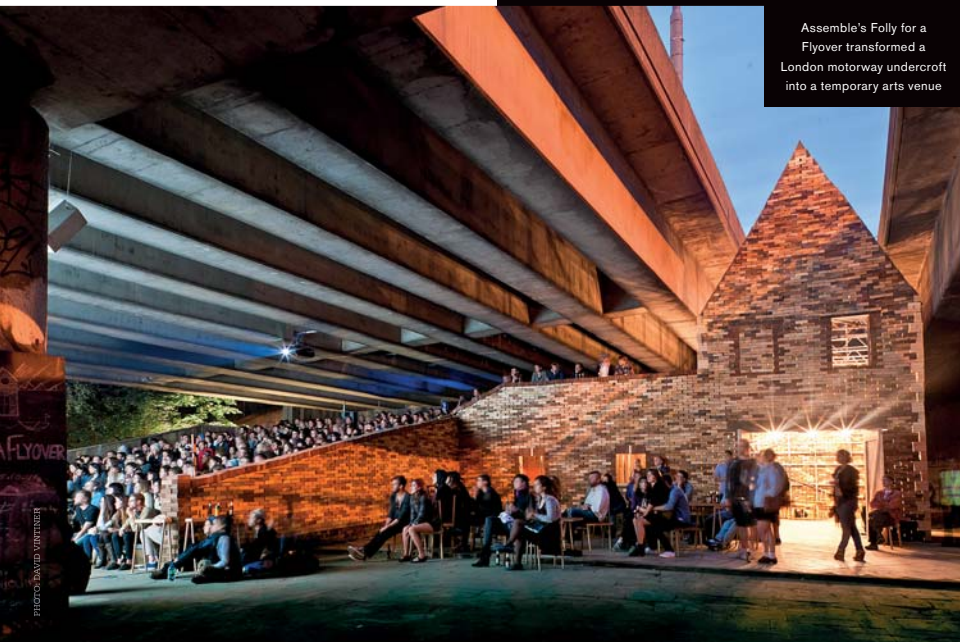


PHOTO: DAVID VINTNER

FLYOVER

Assemble built a pop up theatre in Southampton, UK, inspired by the city's passion for football



PHOTO: DAVID VINTNER

temporary shelters. Since then, he has designed humane shelters for disaster victims around the world, as well as a paper school after the 2008 Sichuan earthquake. When an earthquake devastated Christchurch, New Zealand in 2011, destroying the city's cathedral, Ban created the ethereal Cardboard Cathedral that is designed to stand in the New Zealand city for 50 years.

"What is temporary? What is permanent? I think I have made my own definition," Ban said a year after completing the cathedral. "If people love it, they keep it. After earthquakes, 'permanent' buildings were easily destroyed, so what is permanent? Even concrete buildings are taken down in years if a developer wants to make something else." More and more architects seem to be coming to the same conclusion. When Ban designed shelters for victims of the 1995 Kobe earthquake, he says he was the only architect working in the disaster area. "But when the big earthquake and tsunami took place in northern Japan [in 2011], there were so many famous architects who started working there. It's a really positive change."

Just as Ban's experiments with paper structures have led to some remarkable results, other architects use temporary projects as a way to test



PHOTO: STEPHEN GOODENOUGH



Shigeru Ban's Cardboard Cathedral in Christchurch (above) has been designed to stand for 50 years

material innovations. Last winter, Quebec City's annual ice hotel held a competition for student architects to design themed suites using ice and snow. In Montreal, retired architecture professor Peter Sijkes had his students test novel building forms using ice; he went so far as to design a 3D ice printer to help create the models. In Wales, Miller Kendrick Architects used jigsaw-joined birch plywood to create a stylish but affordable pop-up hotel room. Even the bath was made of plywood.

A chance to experiment

Though it has recently worked on huge projects like sports arenas and skyscrapers, New York-based SHoP Architects still uses pop-up projects to experiment with materials. In 2000, the firm unveiled Dunescape, an amorphous wood pavilion made of prefabricated wood slats. That experiment eventually led to the Barclay Center, a huge arena in Brooklyn whose curved façade is made with 12,000 pieces of pre-rusted weathering steel. "Dunescape's DNA took about 10 years to manifest itself in the Barclay Center," says SHoP architect John Gulliford. "It was very much the same process where we were using direct fabrication and construction automation to deploy systems on a massive scale."

Two recent installations hold similar promise. At this year's Material Immaterial event in Milan, SHoP created Wave/Cave, a 55sq m installation of



Miller Kendrick's pop up hotel, which opened in Wales this summer



• SHoP's Wave/Cave installation at Milan Design Week (left). Flotsam & Jetsam was created using 3D printed bamboo (above)



3D printing gave us the freedom to go with this amorphic form

undulating terracotta tubes. "We worked with a manufacturer who was pretty traditional — they are not digital native types who understand 3D modeling," says Scott Overall, who worked on the project. The installation required about 3,000 drawings to guide craftsmen, so Overall's team developed an automated, scripted process of creating them. The end result is an experiment in "creating a volume out of cladding material rather than cladding a volume," he says. Just as Dunescape influenced the design of the Barclay Center, the process behind Wave/Cave may one day allow SHoP to more efficiently integrate terracotta into its designs.

When SHoP was hired by Design Miami to create a 155sq m gateway pavilion for its design festival last November, it embarked on yet another material exploration. Working in collaboration with 3D printing firm Branch Technology, Flotsam & Jetsam was created with bamboo printed in a lattice-like grid, creating a structure that extends outwards like a coral reef, with a variety of open and enclosed spaces, including a bar that provided enough space for a thousand champagne flutes. "3D printing gave us the freedom to go with this amorphic form," says the project's architect, Rebecca Caillout.



Bamboo — affordable, fast-growing and sustainable — has proved particularly useful as a material for temporary structures. In Hong Kong, architect William Lim has used bamboo rods to create a curved sculptural bridge between two buildings, and a wind chime installation ensconced within the stone, glass and steel surroundings of the Asia Society Hong Kong. Those same kinds of rods have been used for centuries to create temporary theatres for Cantonese opera performances, and they also found their way into a curved pavilion designed by architects Adam Fingrut and Kristof Crolla to provide 350 square metres of shelter in Hong Kong's sun-drenched Zero Carbon Park.

This year, a group of students from the University of Hong Kong, led by course leader Donn Holohan, created the Sun Room pavilion in a rural village in Fujian province. Built on a

A temporary pavilion by SHoP led to the Barclay Center in Brooklyn (above) SHoP's Rebecca Caillout



passionfruit farm and made from a woven bamboo shell that sits atop a pine wood structure, the pavilion is a contemporary spin on local huts that provide a sheltered place to meet or relax. Holohan says the project was an attempt to use bamboo weaving — a local craft normally used to make baskets — in a novel way. “There is just one very old man left who knows how to weave bamboo,” he says. “We know there is a vital need to revitalise the village, but all these traditions that are tied into the landscape are dying. This is an exploration of a material process and an experiment of how you can engage the community.”

Back in Hong Kong, architectural practice Eskyiu is wrapping up the Industrial Forest, a faux-bamboo installation on the third-floor terrace of Spring Workshop, an art space housed in a former factory building. Installed in 2013 and designed to last for four years, the installation consists of hundreds of thin metallic bamboo poles, a reference to the name of the surrounding neighbourhood: Wong Chuk Hang, or Yellow Bamboo Grove. Over the years, the installation



**This is an exploration
of a material process
and an experiment into
how you can engage
the community**

Eskyiu's Industrial Forest has been used as a play space and a home for psychedelic mushrooms



Donn Holohan led a group of Hong Kong students to create the Sun Room Pavilion

has served as a platform for sonic experiments, an interactive play space for children and an unexpected home to psychedelic mushrooms that began growing from the stalks.

“It allows people to interact with and participate in the building of the city,” says Eskyiu co-founder Marisa Yiu. She notes that bamboo is often used to represent Hong Kong’s fast-changing vertical landscape. “It’s a trope of Hong Kong’s temporal nature,” she says. By swapping natural bamboo for aluminium that sways in the wind, evolves and degrades over time, Industrial Forest creates a multi-sensory urban space that also raises questions about the role of nature in a hyper-dense environment like Hong Kong.

Interactivity is a crucial element in many ephemeral projects. Over the past several years, Toronto’s RAW Design has used installations and pop-up spaces — which it calls “adaptable architecture” — as a way to test human behaviour. “There are very subtle things you can do with space or materials to captivate the people moving through them,” says the firm’s director, Roland Rom Colthoff. “It takes five years to do a building, but with these ephemeral pieces, it’s very immediate.”

For three years, in collaboration with landscape architects Ferris + Associates and public art consultants Curio, RAW has run Winter Stations, an annual design competition for interactive installations that allows people to use Toronto’s lakefront



The Sun Room Pavilion in Fujian, China was by HKU students (left); Nuzzles by RAW Design (right)



beaches even in the winter months. The 2017 winners include Asuka Kono and Rachel Salmela, who designed a warm foot bath inspired by Japanese hot springs, and Studio Perch, which suspends 41 fir trees in a kind of upside-down forest.

Winter Stations takes a cue from another competition in Winnipeg, which asks architects to design huts for skaters to warm themselves as they travel along the frozen Assiniboine River in the depth of winter. RAW won the competition in 2013 with Nuzzles, a metal core studded with foam pool noodles. It was a remarkably different approach compared to the sculptural wood huts designed by the previous year's winner, Petkau Architects. "We like to be rather irreverent and poke fun at ourselves and the whole profession," says Colthoff. "Nuzzles was a great way to invert what you would normally expect."

The projects are a cold-weather corollary to summertime sport installations. London office Studio Octopi have created concept plans for floating pools in the River Thames and the Yarra River in Melbourne that would be naturally cleansed by tidal flows. Though the concepts remain unrealised, Paris employed a similar approach to its new summertime pool in the Canal de l'Ourcq, a formerly polluted waterway in the city's north-east. In Mexico City, students from the Institute of Architecture and Design Chihuahua turned a defunct park fountain into a pop-up spa where neighbourhood residents could take a dip.

Colthoff says that, for architects, temporary installations are "a more casual way to interact with people and lay out the programme for buildings." That's true the other way around, too. The public has a chance to interact with architecture on a modest scale in a way that feels as though

they have ownership. In Montreal, La Pépinière prefers using rustic, reusable materials, with plenty of wood and bright colours. Entrance arches and canopies of hanging lights are signature elements, but other than that, the existing nature of a space dictates its design. "We want to give character and magic to our projects, not just eye-catching 'wow' design," says Maxim Bragoli. "We create spaces that are warm, enveloping, with a human scale."

Bragoli says what is especially important is making sure the projects are user-centric. "All of our interventions have a social mission, and each one is a prototype or pilot project. This flexibility is an opportunity to test users and engage the community to see what they think." That has had a knock-on effect on the way Montreal designs public spaces, with a growing emphasis on adaptability.

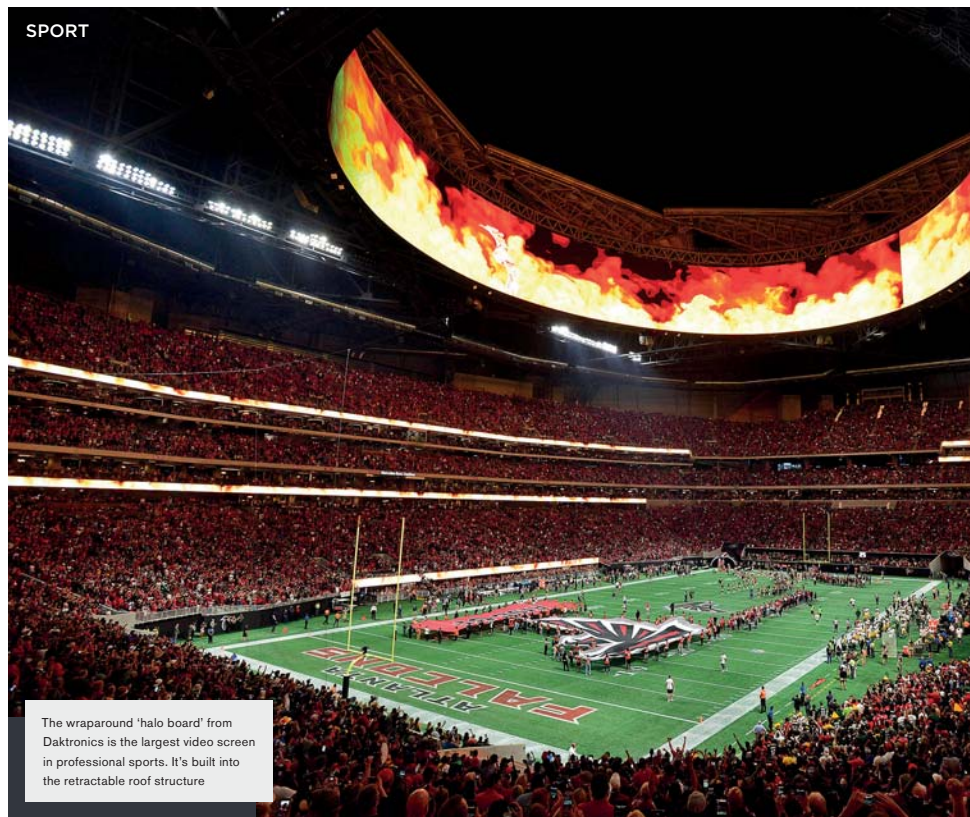
"We're in the midst of creating a true systemic change in the way that people see their public space," says Bragoli. Ephemeral architecture may be fleeting, but its legacy lives on. ●



Roland Rom Colthoff, director, RAW Design

North by Studio Perch, one of the 2017 Winter Stations winners





The wraparound 'halo board' from Daktronics is the largest video screen in professional sports. It's built into the retractable roof structure

Could the opening of the Mercedes Benz Stadium in Atlanta usher in a new era of sports venue design?
Tom Walker speaks to the people who made it happen

flying high



STEPHEN W. COULSH



The design was inspired, in part, by the Roman Pantheon

The US\$1.5bn (€1.24bn, £1.16bn) Mercedes-Benz Stadium in Atlanta, US, opened on 29 August when it hosted an NFL pre-season game between the Atlanta Falcons and the Arizona Cardinals. Designed by architecture firm HOK's Sports+Recreation+Entertainment arm – in collaboration with tvsdesign, Goode Van Slyke Architecture and Stanley Beaman & Sears – the stadium has been hailed as one of the most advanced sports venues in the world.

Designed to be both scalable and flexible in order to host a wide range of sports and entertainment events, the stadium will have two main tenants – the high-flying Falcons and a brand new Major League Soccer (MLS) franchise, Atlanta United. As well as hosting the two clubs, the venue has already secured a string of other premium events, including the Super Bowl in 2019 and the NCAA Final Four in 2020. It's also been designed to meet the criteria to hold FIFA World Cup matches, just in case the US decides to bid for the tournament.

BREAKING CONVENTIONS

According to Bill Johnson, HOK's design principal and lead architect on the project, the venue design breaks away from the conventions of traditional sports facility design. He credits billionaire Arthur Blank, owner and chair of AMB Sports & Entertainment – the parent company of the Falcons and Atlanta United – for allowing the team to come up with a fresh approach to stadium design.

"It was a unique and amazing opportunity that Arthur gave us," Johnson says. "Many major league

franchise owners will say that they want a venue similar to an existing one – or that they want a stadium which produces revenue comparable to 'stadium X' somewhere comparable.

"You don't get many people saying they want something that people will want to come and see, not because of the football played in it, but because it has value as a piece of architecture.

"Arthur challenged us to come up with something totally fresh and innovative and that's why we have the building that we have today."

For Johnson, the challenge to create something entirely new was a timely one, as he sees sports facility design in danger of being flooded with too many "cookie cutter" projects.

"The strength of sports venue design – the way designs are now driven by the need to produce functional buildings – can also be its weakness," he explains. "There's a huge focus on how the venue performs. Aspects such as fan comfort, excellent sight-lines, people flow and convenient amenities tend to drive the final form of the building.

"Concentrating on those elements and to ensure functionality is definitely a good thing, but the approach also has a flipside. I think that focusing solely on functional aspects can lead us to having very mundane and very similar sports stadiums."

CREATING AN ICON

Mundane is a term which definitely doesn't apply to the design of Mercedes-Benz Stadium. Its distinctive appearance, says Johnson, is a result of the unique design process that the team adopted, which – literally – turned convention on its head.



Bill Johnson, HOK design principal

Made up of eight, triangular ETFE 'petals', the stadium's semi-transparent roof opens and closes like the aperture of a camera



The building's skin is split into angular, wing-like exterior sections (inspired by the wings of a falcon) covered by a semi-transparent ETFE facade, and acts as a continuation of the roof.

The transparency of the facade also creates a 16-storey tall 'Window to the City' that brings natural light into the venue. It also provides spectacular floor-to-ceiling views of Atlanta's skyline, connecting fans to the city's landscape and offering them a natural visual impact.

FAN'S FIRST APPROACH

While Johnson and the HOK team adopted an unconventional design process, they didn't ignore the need for the building to be functional. Johnson says that while the venue can be seen as an architectural statement, the focus has always been on providing an unforgettable fan experience.

"The Falcons have been a great client, because they wanted to innovate on every level, all for the benefit of the fan experience," he says. "What that means to me, as lead designer, is that you're going to take everything that is out there and you are taking it all up a notch."

The Falcons have been a great client, because they wanted to innovate on every level, all for the benefit of the fan experience

One element which has been elevated is the technology at the stadium. Catering for a generation of connected fans, it has a total of 1,800 wi-fi points, connected by 4,000 miles of fibreoptic cable. The network's immense capacity means that it can handle whatever's thrown at it – even if all 71,000 spectators decide to start streaming simultaneously, which is increasingly likely.

The most impressive piece of technology, however, is the linear 'halo board' inside the stadium, which acts as the main scoreboard. At 1,100ft-long and 58ft-tall, it's the largest video board in professional sports, and gives fans 63,000sq ft of screen to view live action, highlights and iso-cameras.

"The screen offers clear views from every seat, but it also preserves the beauty of the roof," says Johnson.

Keeping fans connected to the action has been a priority and in addition to the halo board, there is an additional video display – a 100ft-high mega column – wrapped with a 3D video board. There are also 2,000 large HD TVs dotted throughout the venue, ensuring that fans are kept up to date with the action wherever they are inside the stadium.

CAREER HIGHLIGHT

For Johnson, the Mercedes Benz Stadium represents the pinnacle in a long, distinguished career which has seen him design some of America's largest sports projects, including the Atlanta Olympic Stadium and the MetLife Stadium, home of the New York Giants and the New York Jets.

"It was an amazing opportunity to work on the Atlanta Olympic Stadium; I thought 'nothing will ever be better than this,'" he says. "Then I had the chance to work on the MetLife stadium in New York – and again I thought 'nothing will top this'."

"But now, with the Mercedes Benz Stadium, I'm pretty sure that this really is 'the one.'" ●



BRC Imagination Arts
THE ORIGINAL EXPERIENTIAL AGENCY™



For nearly four decades, BRC Imagination Arts has collaborated with clients and architects to create transformative brand destinations, expo pavilions and cultural attractions all over the world.

At nearly every World Expo since 1986, our clients' pavilions have consistently enjoyed record attendance, top-tier awards and commendations, outstanding audience reviews, and lasting good will.

www.brcweb.com

Follow us on





Kazakhstan's National Pavilion, designed by Smith and Gill, formed a centerpiece at the Expo

REFLECTIONS ON...

Astana Expo

Astana Expo 2017 said goodbye to the last of its four million guests in September. So was it successful? Christian Lachel, creative director for the United States Pavilion, shares his highlights

Kazakhstan moved its capital from Almaty to Astana in 1998, and embarked on a fiendishly difficult task that has defeated many city planners: building a visionary, futuristic city that incorporates a number of styles and functions into a single cohesive, awe-inspiring whole. The same kind of visionary thinking went into the design of the site for the Astana Expo. The Expo plan fitted snugly in the context of greater Astana: elegant and modern, guided by a design

intention to present a "future that works for everyone."

The brevity of the Expo – three months – and the modest ambitions of the Expo planners (Astana drew 4 million, in contrast to Shanghai's 73 million in 2010) contributed to its success. Expo participants embraced the challenge of creating entertaining, charismatic pavilions on short schedules with limited budgets. Almost every participant created a solution that contributed to the liveliness and pure fun of this Expo.





Nur Alem Pavilion (The Sphere)

Architect: Adrian Smith and Gordon Gill

The Expo hosts got this one just right. First, the Nur Alem Pavilion was a brilliant icon for the Expo. This dramatic sphere anchored the site and drew people towards it. It shimmered in the sun during the day, and was illuminated with coloured lights during the striking Kazakh sunsets. At night, it came alive with LED lighting featuring signature media. The presentations inside were flawless, from the mythic history of Kazakhstan to the kinds of energy that will power the 21st century.



Shell Pavilion

Design: Shell

This place, one of the few stand-alone corporate pavilions, made a tactical decision to win the hearts of children (and the parents trying to entertain them). Shell invited kids to come inside, engage in fun, interactive activities and 'Build Your Own Future World'. Lots of smiling faces emerging from this pavilion.

Germany

Design: Gtp2 Architekten GmbH & Insglück Markeninszenierung

This pavilion combined an elegant, efficient design aesthetic with a clever interactivity strategy to please guests. We were given a 'smart stick' geared to our language preference. This stick allowed us to collect information, solutions and ideas on our journey. We were then invited to discover various kinds of emerging energy and a variety of energy products. In the final immersive media space, the energy stick triggered a show that affirmed the need for diverse solutions the world will need to meet our energy needs. Great hospitality complemented this programme of guest engagement.

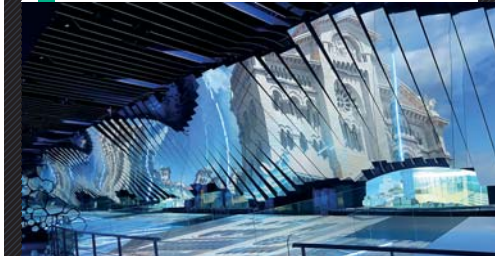




Austria

Architect: BWM

Austria delivered on an oft-ignored commandment of Expo design: "Expos are supposed to be FUN!" As I entered, I found myself inside a wild and whimsical 'Power Machine,' with all the energy supplied by guests. I joined my fellow visitors pedaling a stationary bike and pulling on ropes to power a Willy Wonka style factory of pop art kinetic sculptures. This pavilion put every guest at the centre of the experience.



Monaco

Design: Simmetric Srl

Great pavilions don't have to be large and complex. Monaco produced a mesmerising experience that featured undulating mirrored blades that reflected media relating to Monaco's relationship with its marine environment. The effect, enhanced with a lush soundscape and aromas, was hypnotic. And Monaco also served the best cup of coffee at the Expo, part of its outstanding hospitality programme.



United States

Design: BRC Imagination Arts

The United States Pavilion was all about hospitality and engagement. After a greeting by a friendly ambassador, guests were asked, "What is the source of infinite energy?" An immersive multi-media presentation delivered the answer with a blast of exhilarating music, acrobatic dancing and a cascade of kinetic images. The source of infinite energy is, of course, us! People! Harnessing our ingenuity and innovation can solve all the challenges we face in creating an abundant, sustainable world. This show was followed by an exhibition that included an interactive energy model, interactive video walls, and supporting fun photo opportunities.



Netherlands

Design: Expo Pavilion Group/Gestalt

This exercise in pure fun asked us, "What if the great Dutch painter Piet Mondrian designed a pavilion that showed the world how, for centuries, the Dutch have used boldness and ingenuity to adapt to a hostile environment and climate change?"

Mondrian's bright and playful graphic design put across the theme 'Low Land, High Energy' with simplicity and style. The highlight was a 3D holographic theater. This was a multi-layered visual feast that engaged the Expo theme in a way that was effortless, seamless and memorable.



DESIGN BY ASIF KHAN © CROWN COPYRIGHT

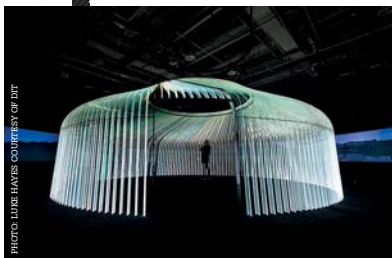


PHOTO: LINDA HAYES, COURTESY OF JET

Great Britain Design: Asif Khan

Asif Khan's pavilion was simple, elegant and striking. As we entered, we discovered a living, computer-generated 'universal landscape' that cycled through a virtual night and day. At the centre of this landscape was a stylised, immersive yurt-inspired structure composed of transparent spokes that illuminated when touched. Then came a gallery of energy innovations in the UK, and a special display on graphene – a wonder material that is the strongest, thinnest and most permeable material known to man.

UAE Design: Ralph Appelbaum Associates

This pavilion was the perfect precursor to the UAE hosting the next world Expo in Dubai. This is a country that will provide a gracious, hospitable welcome to the world. The signature experience was an immersive, energetic presentation about how the UAE is building on its past traditions to provide future generations with sustainable and stable sources of energy.



Switzerland

Design: Aterlier Of

Switzerland had a standout pavilion in Milan, and their expression of 'Flower Power' in Astana was another winner. Here we entered a world illuminated by a kinetic light sculpture featuring poles with spinning LED lights projecting flowers. We were then invited to enter three narrative 'chateaux': energy self-sufficiency, food production and clean water. All this, plus a flexible space to showcase new ideas and hold creative workshops.

Israel

Design: AVS Creative Visual Solutions

A powerful experience can be short and straightforward. The Israel pavilion featured two simple, well-executed five-minute show experiences that delighted guests.

The first room, 'Energy Country', was an infinity room that plunged us into all aspects of Israeli culture, powered by alternative forms of energy. The second room presented a live dancer supported by 360-degree video projections and an LED sphere hovering above the stage. This was a dynamic fusion of art, dance, science and technology.



PHOTO: YEREMIAH GONZALEZ



Russia

Commissioner: Georgy Kalamonov

This pavilion was very well executed and quite impressive. Russia chose to focus its narrative firepower on the story of icebreakers finding energy under the Arctic. Here Russia showcased its technology and expertise about finding energy in treacherous environments to power the near future. Guests found themselves under the ice in the Arctic and in an ice cave. We were even invited to touch a giant chunk of Arctic ice.



Japan

Commissioner general: Tomiyasu Nakamura

Once again, Japan delivered an extraordinary experience with great narrative power. Zone 1 presented the challenges Japan (and the world) faces in the 21st century and beyond. Zone 2 presented a super wide screen immersive show experience that reassured us that a bountiful future of clean energy can be realised by the wise use of emerging technologies. Zone 3 invited guests to interact with these technologies. I was happy to see Morzio and Kiccio, the mascots from Expo 2005, here.



South Korea

Design: Sigong Tech Co. Ltd

What do I want in an Expo pavilion? Beauty, engagement, the opportunity to learn through enchantment, and meaningful interaction. The South Korean pavilion had all that, and one thing more: love. The first room was an animation theater featuring an artist who drew vignettes from the history of energy in Korea. These vignettes then came to life, and formed a portrait of Korea as an energy powerhouse. The second room was the love story, featuring projections on slits of cloth, facilitating the entrances and exits of live actors. In the third room, every guest was given a Samsung mini tablet and invited to create a 'future world of energy'.



Singapore

Design: Design: Zarch Collaboratives Pte Ltd & Pico Art International Pte Ltd

'Small City, Big Ideas.' The Singapore Pavilion invited us to step into a giant terrarium, a metaphor for Singapore as a Garden City. Here we could linger in this refreshing, entertaining environment and discover exhibits on the specific ways that Singapore is responding to the need to create a sustainable energy future. This pavilion demonstrated that a non-narrative, environmental storytelling approach can be successful with a sufficiently bold design commitment.



Thailand

Design: Index Creative
Village Public Co. Ltd.

Who knew that an ear of corn could make such an engaging host? Pa-Lang was the corn mascot of the Thailand Pavilion, one of my favourites at Expo 2017 in Astana. The creators of this pavilion knew that the best (and only effective) way to educate an audience is through light-hearted, delightful entertainment. We moved from a traditional introductory gallery featuring Pa-Lang to a 3-D animation theatre highlighting the role that agriculture plays in the development of sustainable, renewable bio-energy. The final hall was an Energy Creation Lab, where we found multimedia presentations, videos and interactives that invited us to explore Thai-style biomass energy solutions. It even got the social media element right with one of the more active outreach and engagement strategies.

Malaysia

Design: Malaysia Green
Technology Corp.

This simple pavilion, done on a budget, proved to be very popular with guests. Everyone called it 'The Butterfly Pavilion.' The centerpiece was a floor-to-ceiling full immersion rainforest room. Here we found ourselves twirling amidst thousands of butterflies...and the occasional tiger that would emerge from the foliage. The Malaysians were very clever about using social media to build the buzz for this pavilion, boosting it into the top 10 in popularity.



Artists and Robots was curated by Miguel Chevalier and Jérôme Neutres

Three other experiences of note:

ARTISTS AND ROBOTS

In the Upper Exhibit area of the Arts Pavilion, I enjoyed a fascinating exhibit about how artists and robots were working together to create unique expressions of art. There were entire immersive rooms of art created by robots programmed by artists. Another part of this exhibit featured three robots sketching and drawing an object in real time, using their eye sensor. Each robot saw and drew something different depending on its point of view.

THEMED PAVILION SHOWS

BALL SCULPTURE SHOW

This show combined balls with LED light and lighting effects to take us through every type of energy. No narrative story here, but a very beautiful show combining sculpture, art and media.

SMART GRID SHOW

This was another highly imaginative, abstract use of media. LED screens introduced this show, and then gave way to a physical, illuminated cube of light. This show used music, light and sculpture to captivate guests.

WAS THIS EXPO SUCCESSFUL?

Visitors loved this Expo. I saw happy, enthusiastic Expo visitors enjoying themselves. And the people who came to the Expo to share their expertise and learn from others also helped make it a success. Here the global community came together in a programme of symposiums to engage in lively discussions about how to create a sustainable energy future. This was a big stage for central Asia, and Kazakhstan used it to their advantage: making friends, influencing guests, and winning hearts.

Many pavilion producers were fellow members of the group that produced some of the most memorable pavilions for the Aichi Japan Expo in 2005. Many of us met again in



Shanghai, producing pavilions for Expo 2010 (and again in 2015 in Milan).

I hope we meet yet again in Dubai in 2020, because Expos offer people like us a unique opportunity to make the world a better place. They are defiant beacons of optimism and courage that exist in a magic space beyond the walls and borders countries erect to fight off the rest of the world. ●

ABOUT CHRISTIAN LACHEL

Christian Lachel is vice president and executive creative director at BRC Imagination Arts. Astana was his sixth Expo as a creative director/producer, beginning with Expo 2005 in Aichi, Japan.



Gerflor 'King' of the West End

King is a leading interactive entertainment company for the mobile world, with people all around the world playing one or more of their games.

When the new King building in the heart of London's West End was being conceived, it was always going to have a gym and fitness facility for the staff. No forward-thinking company like King would be complete without an on-site fitness suite and gym. It's their commitment that everybody in the company should be healthy and happy. No bad thing.

King, as in their previous building, would specify Gerflor products once again, this time choosing some 210m² Gerflor's Taraflex® Sport M Performance vinyl sports flooring in three pulsating colours; Pink, Silver Grey and London Light Blue.

"The Taraflex flooring is quiet, resilient and very hard wearing. Our staff love it and it's great for cutting in designs which is key to King."

Brondie McNamara, Project Manager

Learn more about Gerflor solutions, ask for a free sample or contact us to speak to a specialist today by calling **01926 622 600**, emailing **contractuk@gerflor.com**, or visiting **gerflor.co.uk** for the latest innovations.

 [gerflorsportsuk](https://twitter.com/gerflorsportsuk)

Benefits of Taraflex

1 High Performance Levels

Taraflex floors meet the exacting standard of EN14904 meaning whether its exercise classes to elite level competition sport, Taraflex provides top

2 Low Maintenance

With innovative surface treatment Protoscol, whole life costs are among the lowest possible for any sports floor with minimal daily maintenance and less expensive long term regimes than other types of sports floors.

3 Environmentally Friendly Production

NO heavy metal
NO solvent
NO formaldehyde
NO substance potentially subject to REACH* restrictions

4 Design Opportunities

17 vibrant colours and three realistic wood options give huge design opportunities to inspire and energise users.

5 Reputation

With millions of users playing on Taraflex floors every day and at every level, there is no exercise or sport facility that should be without a Taraflex playing surface.



Gerflor[®]
theflooringgroup



360° WELLNESS DESIGN

hospitality commercial residential



AWLAKÉ
www.awlakeonline.com

BIG SPECIAL



Bjarke Ingels
p104



Sheela Maini Søgaard
p112



Finn Norkjaer
p116



Thomas Christoffersen
p117



Andreas Klok Pedersen
p118



Kai-Uwe Bergmann
p119



David Zahle
p120



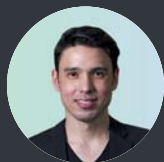
Jakob Lange
p121



Daniel Sundlin
p122



Beat Schenk
p123



Brian Yang
p124



Jakob Sand
p125

BJARKE INGELS

As the Lego House opens in Denmark, BIG founder Bjarke Ingels talks to Magali Robathan about his love of Lego, his change of focus and the role of the collective in getting BIG to the top

We're in a car with Bjarke Ingels. It's almost midnight, and the Danish countryside can't be seen in the pitch black outside. Heavy rain lashes against the windscreen.

We pull into a muddy field. It's completely deserted, apart from one other car. A figure approaches our vehicle.

Ingels gets out and embraces the other man, who turns out to be Finn Nørkjær, one of 12 partners at BIG. Nørkjær phoned earlier that evening, excited about showing Ingels the newly completed Tirpitz Museum before its official opening the next day.

We get out of the car and run towards a large building in the pouring rain. Nørkjær takes a remote control from his pocket, and all of a sudden the museum lights up and everyone gasps. Ingels and Nørkjær run ahead, shouting excitedly, taking pictures with their phones. Someone has sent Ingels a drone photo of the museum from above. "Look at this!" he shouts, passing it around. The atmosphere is electric.

Earlier that day, Ingels flew into Billund in a helicopter to check on the Lego House and have dinner with Kjeld Kirk Kristiansen, the third generation owner of the Lego Group. Tomorrow, he will help launch the BIG-designed Tirpitz Museum with the Crown Prince of Denmark.

It's a packed, exciting life for one of the world's most famous architects, but I get the feeling that this moment sums up what makes it worthwhile for

him – running around with his friend and colleague, seeing one of their creations come to life.


This moment also illustrates a fact that the media often ignores. It's not just about Ingels. Every project is the result of a team of people, or 'BIGsters', as he calls them. Nørkjær and Ingels were in charge of the Tirpitz Museum, with another partner, Brian Yang, leading the project, and like all of BIG's work, it's the result of a design process that sees all members of the team, even interns, expected to contribute.

"Of course I founded the company and I'm the creative leader, but I've never kept it a secret that I work with great, gifted people," says Ingels, once we're back in the car. "Of the partners at BIG, about half were interns in the early days of the company, so we've been together for a ridiculously long time. We've developed a culture through friendship and collaboration that's very strong."

While Ingels rejects the media's portrayal of him as the lone genius, he's also not afraid to emphasise his own role in BIG's success.

"The truth is that collaboration is about collective effort and it's also about individual contribution – so both are actually true," he says. "There wouldn't be any BIG without me and there wouldn't be any BIG without all the BIGsters."

"I don't see that there's a dichotomy. Has Stephen Spielberg made you think that he's the only one contributing to his films? Not really. But, of course, he's the director and he consistently manages to

A man with short brown hair and a goatee is sitting on a large, white, stepped brick structure. He is wearing a black jacket over a light-colored t-shirt, black trousers, and black leather shoes. His hands are clasped in his lap. The structure is covered in blue carpeting. The background shows more of the same structure, creating a sense of depth and perspective. The lighting is bright, suggesting an outdoor setting during the day.

"If BIG had been founded for one project, it would have been Lego House," says Ingels

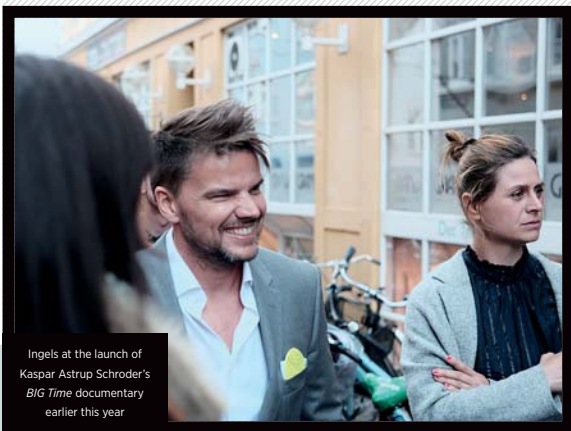
We want to take responsibility and initiative in giving form to our future

put together a team that can deliver something that other directors don't."

Whatever the approach, it's certainly working. BIG, and Bjarke Ingels, need no introduction. Over the past 12 years, the practice has grown from a tiny operation in Ingels' apartment to a global firm of 450 people with offices in Copenhagen, New York and London. They've made their name with a series of projects based on bold, playful and often unexpected ideas, whether that's putting a ski slope on top of a factory (Amager Resource Center, Denmark), blending an American skyscraper with a Danish courtyard building (VIA 57 West, New York) or designing a 10 storey building that allows people to cycle right up to their apartment (the 8 House, Copenhagen).

The firm has now branched into product design, launched its own in-house engineering division, and has a dizzying amount of headline-grabbing projects on the go, including 2 World Trade Center, the Washington Redskins' new stadium, Google's HQ, and the Dryline, a storm barrier for Lower Manhattan that doubles as an amenity for the community.

While BIG has made a name turning "the ordinary into the extraordinary," as Ingels puts it, the firm is now also working on a handful of projects that could never be described as ordinary. BIG has teamed up



Ingels at the launch of Kaspar Astrup Schroder's *BIG Time* documentary earlier this year



BIG Time documents Bjarke Ingels' life over a seven year period

with LA firm Virgin Hyperloop One to build what they hope will be the world's first Hyperloop high-speed transport system, and Ingels is also working with the government of Dubai to realise the UAE's recently-announced ambition to build a city on Mars by 2117.

"Increasingly we don't just want to make a good-looking version of something that's already been done before; we want to take responsibility and initiative in giving form to our future," says Ingels.

As BIG has grown, Ingels has become something of a celebrity – last year he was named by *Time* magazine as one of the '100 most influential people in the world'. A recently released film, *BIG Time*, shows the man as well as the architect, with viewers seeing him falling in love, worrying about his health and struggling with the responsibility of his position.

LEGO HOUSE

BIG's latest project, the Lego House, launched in Billund, Denmark, at the end of September, and it's something of a dream come true for Lego-mad Ingels.

"If BIG had been founded for one single building, it would have been this one," he says.

"It's such a joyful exploration of all of the different potential expressions of Lego."

The new visitor attraction was designed to look like a massive stack of Lego bricks, with a giant 2x4 Lego brick sitting on the very top. It features four colour coded play zones with a variety of different experiences, three restaurants, a conference centre, a Lego Museum and a Masterpiece Gallery showcasing fans' personal Lego creations.



Tivoli Museum opened in June on Denmark's west coast. It is connected to a WWII bunker

LEGO HOUSE'S MASTERPIECE
GALLERY houses large
models made by LEGO fans



PHOTO: KIM CHRISTENSEN



The LEGO building is designed to look like a stack of LEGO bricks, with a 2x4 brick on top

PHOTO: IVAN BAKAR

The site of the LEGO House was previously home to Billund's Town Hall, so it was important to include publicly accessible areas within the building. Visitors have to pay to enter the galleries (or 'experience zones'), but parts of the building – including the 20,000sq ft indoor lobby, the brightly coloured roof terraces, and one of the restaurants – are free to access. Ingels explains that he hopes the lobby will be used as a town square by the citizens of Billund. "I think it has a generosity that could make it a truly public square, even though it's inside the building," he says.

For Ingels, this was pretty much his dream project. His love of LEGO goes back to his childhood. "Like any Dane, I grew up with LEGO," he says. "What's unique about LEGO as a toy is that it's actually not a toy, it's a vehicle for systematic creativity that enables the child to create its own world and then to inhabit that world through play.

"As architects, we have the ability to build the world we'd like to live in, and then live in it. The sense of empowerment that architecture can give you when it's working well is the same kind of empowerment that LEGO gives a child."

When Ingels got the call inviting BIG to compete in the LEGO House competition, he was absolutely determined they were going to win.

"We went nuts and explored all the different sort of expressions of LEGO that are out there," he says.



Opening day at the LEGO House with the Danish Royal Family

The sense of empowerment that architecture can give you when it's working well is the same kind of empowerment that LEGO gives a child

FAVOURITES

Book: *1000 Plateaus*, Gilles Deleuze, Felix Guattari

Film: *Adaptation*, Charlie Kaufmann/Spike Jonze

Song: *Nana*, Acid Pauli

Hotel: Singita Lebombo, Kruger

National Park, South Africa

Restaurant: NOMA

Sporting venue: Ingalls Hockey

Rink, by Eero Saarinen, Yale

Park: Parc Guell by Antoni Gaudi, Barcelona

Place on earth: Iceland

PHOTO: IWAN BAJAN

LEGO HOUSE IS IN THE heart of Billund, where the Lego brick was invented and is produced

We feel like we know quite a bit about Lego, but these guys, they're frigging amazing

"For the presentation, we basically took all of the evidence of the creative process, stuffed it into the back of a van and transformed their conference room into our studio. The walls were filled with pin ups from the creative process, we had models everywhere. We'd also made a Lego architecture version of the Lego House including a Lego miniature figure that was meant to be me. It was pretty clear how much we wanted it."

One of the first things BIG did after winning the competition was to invite a group of 20 Lego 'super-users' to a workshop where they presented their ideas and asked for feedback. From this came two ideas that made it into the final design: the Masterpiece Gallery on top of the building, which acts as a museum for fans' Lego creations, and the Lego history vault at the bottom of the building.

"Working with these people was another form of collaboration," says Ingels. "I mean, we feel like we know quite a bit about designing with Lego, but these guys, they're frigging amazing."

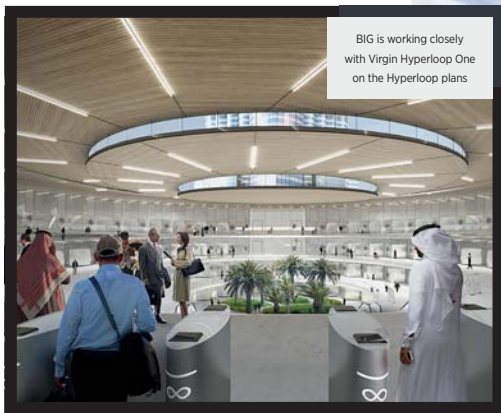
BIG partner Brian Yang was project leader for the competition and led the project in the early days. It was then passed down to Finn Nørkjær to make it happen. "Finn has been fighting the battles of actually getting it built the way it is now, and God knows, it's



PHOTO: JONAS OLSEN

Ingels invited Lego super users to a workshop for feedback on BIG's Lego House designs

BIG is working closely with Virgin Hyperloop One on the Hyperloop plans



been a pretty bumpy ride,” says Ingels. “Very much thanks to Finn, though, it looks as if it’s turned into a successful delivery in the end.”

He stops, grins widely, and adds: “It’s pretty goddamn epic actually.”

THE MAKING OF BIG

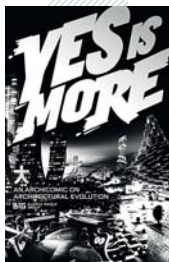
Ingels started his career working for Rem Koolhaas at OMA in Rotterdam. In 2001, he and fellow OMA employee Julien De Smedt decided to leave and go it alone. They launched PLOT together in Copenhagen and began looking for work.

At the time, Ingels and De Smedt had plenty of ideas, talent and enthusiasm, but very little experience. When they won their first competition, for the Water Culture House in North Jutland, Denmark, Ingels realised they were a little out of their depth. “I’d spent the day painting our office only to come home at 10pm and find this big folder from our future client full of hundreds of pages of documents and project items to respond to the following day,” he says. “I’d been one of the lead designers of the Seattle Central Public Library while I was at OMA but I hadn’t had any sort of management responsibilities and I had no idea about any of this.”

Just then, Ingels’ phone rang. On the other end was Finn Nørkjær, an experienced architect and an employee of the firm that had come second in the Water Culture House competition, who was so intrigued by PLOT’s winning entry that he wanted to find out more. Ingels invited him around immediately, and they spent several hours going through the documents ahead of the client meeting the following

IMAGE: DRUCK

2 World Trade Center consists of seven stacked volumes with a public plaza at the base



The *Yes Is More* manifesto sets out BIG’s philosophies in comic book form



morning. A week later, Nørkjær joined the firm, and is now one of the 12 partners.

Examples of this kind of fortunate timing come up again and again in my chat with Ingels. BIG won its first major commission when then intern (now partner) David Zahle bumped into Danish developer Per Hopfner in his friend’s backyard, and many opportunities have come about as a result of being in the right place at the right time.

“There’s definitely been a lot of serendipity and providence involved,” says Ingels. “It’s very obvious to me that if you send out clear signals, at some point they’ll find their way back to you.”

In 2005, Ingels and De Smedt decided to wind down PLOT, and BIG was launched later that year. The rise of BIG has been well documented, from the 8 House complex and Danish Maritime Museum in Denmark to the publication of Ingels’ *Yes is More* comic-book-style manifesto in 2009. Being commissioned to design the VIA 57 West apartment block in Manhattan (opened in 2016) represented a huge leap forward for the practice, and led to the opening of BIG’s US office in 2010. Meanwhile, the practice was

working on a series of increasingly high profile projects across the world, and Ingels was fast becoming a well known name within the profession.

It hasn't all been plain sailing though. By 2007, BIG were winning good projects, but the financial side of the business was struggling. "By the fall of 2007, we were going down," says Ingels. "I took control of our finances for a year, let go of 35 people, cut down everything I could, including lunches and our cleaning services, borrowed some money and managed to turn the company around."

Ingels realised he needed to hire someone with a strong business mind, and took on ex McKinsey consultant Sheela Maini Sogaard, who is now a partner and CEO of the firm.

"Sheela has a really healthy confrontational attitude," says Ingels. "She started phoning our late payers, getting them to cough up. Where architects are typically overly optimistic, Sheela has a healthy

scepticism. And where most of us would happily do a project for free, she has a 'fuck you, pay me' attitude. We needed that."

THE CULTURE

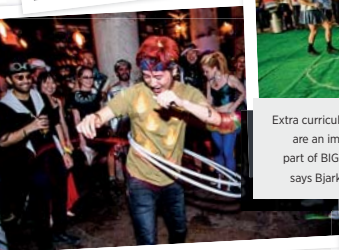
All of the BIG partners I speak to for this article agree that the culture of the organisation is a huge part of its success, and the reason why they are such a close knit team.

Ingels describes the practice as a "true meritocracy," with decisions about who to put forward based on talent rather than the amount of experience a person has. The firm has a very flat hierarchy, with open plan offices making it easy for employees to communicate, and all staff, including interns, encouraged to contribute to design conversations.

Extra curricular activities are also an important part of the life of the practice – there are legendary parties, study trips, a 'BIG band' and a series of physical challenges, including cycling over the Andes and scaling the world's seven tallest peaks.



Extra curricular activities are an important part of BIG's culture, says Bjarke Ingels



Mars Science City
will explore the
practical challenges
of living on Mars



Is this something Ingels set out to create?

"It's not really an agenda, it's more a question of how you'd like to lead your life," he says. "Architects tend to work long hours, but even if you're working a normal day, it's still close to half of your waking hours, so you'd better have a good time doing it."

"It's not just about the parties though. If you put a lot of like-minded, energetic, passionate, brilliant, creative people in a room with some fascinating problems to solve and a big deadline at the end, it's practically like a party. So even without intoxicating substances, it's a blast."

So, what's next? I catch up with Ingels a couple of months after our meeting in Denmark, and his sights are set firmly on the future.

"I'm interested in those moments where there's some kind of transformation happening in society," he says. "Those changes come with new problems, but also new possibilities. If you're aware, you have an amazing opportunity to give form to the future when those changes occur."

I ask Ingels which future projects he's particularly excited about. He highlights two.

The first is a collaboration with Douglas Durst, the real estate investor and developer behind VIA 57 West. Details of this project aren't yet public, Ingels says, but it will be "three times bigger than VIA, and it's the only thing I can imagine that could make VIA look timid." It will include several different components, and a "handful of public programs," he adds.

Eventually it's going to be a presence of Earth on Mars, it's incredibly exciting

The second project sounds like the stuff of science fiction, and certainly ties in with Ingels' desire to give form to the future. BIG is collaborating with the government of Dubai to create a huge space simulation development called Mars Science City, which will be used to explore the practical challenges of helping the United Arab Emirates achieve its dream of building the first settlement on Mars by 2117.

The AED 500 million-scheme, extending over 1.9m sq ft, will simulate conditions on the surface of the red planet, with heat and radiation insulation and walls which are 3D printed from desert sand.

Mars Science City will have a museum displaying "humanity's greatest space achievements", with educational areas to engage young people and inspire in them a passion for space, exploration and discovery.

It will also include food, energy and water labs, agricultural testing and research into food security.

"There will be a presence of Mars on Earth to begin with, and then eventually there will be a presence of Earth on Mars," says Ingels. "It's incredibly exciting."

November sees Ingels moving from New York to Copenhagen with his fiancée, architect Ruth Otero, in order to take advantage of what he sees as the start of a building boom in Europe.

"The last few years have been dominated by America, but there's no doubt that Europe is back at full throttle," he says. "I'm keen to spend a few years focusing on opportunities in Europe."

"We've got plenty to be excited about."

KEY DATES

2004

Bjarke Ingels
launches PLOT with
Julien De Smedt

2005

Ingels launches the
Bjarke Ingels Group
in Copenhagen

2009

BIG becomes a
partnership with
eight partners:
Bjarke Ingels,
Sheela Maini
Sogaard, Kai-Uwe
Bergmann, Andrea
Klok Pedersen,
David Zahle, Jakob
Lange, Finn Nørkjær
and Thomas
Christoffersen

2010

BIG opens its
New York office

2014

Research and
development lab
BIG ideas is born

2015

BIG appoints four
new partners: Beat
Schenk, Daniel
Sundlin, Jakob Sand
and Brian Yang

2016

BIG's London office
opens in Kings Cross

2017

BIG launches its
own in house
engineering,
landscape, interior
and space planning
department

SHEELA MAINI SØGAARD

Partner and CEO of BIG talks to Magali Robathan about the business plan behind the studio's meteoric rise and addressing the gender balance at the top

Sheela Maini Søgaard first met Bjarke Ingels in 2008 while on maternity leave from a previous job. BIG was making a name for itself, but was struggling financially, and having a difficult time with clients not paying bills.

With a strong business background and a pragmatic, no nonsense attitude, Søgaard knew she could help. During their meeting, she passed on some business tips to Ingels, who later contacted her to say her tips were working, and to offer her the job of chief financial officer. Søgaard set herself the task of dealing with the firm's finances so that the architects could concentrate on what they did best.

"It freed up Bjarke to focus on the projects," she says. "I couldn't contribute to the architecture side of things, but I could be the person who calls the clients and says, if you don't pay, I'm passing this to the lawyer."

Getting the clients to pay up was just part of the story though. Since she joined, BIG has grown from 45 employees to more than 450 across offices in London, Copenhagen and New York City, and Søgaard has been a driving force in its evolution into a professional-run, global organisation. Here she talks about the challenges of her role and of BIG's rapid growth.

What's your background?

I grew up in Dubai and Saudi Arabia, with intermittent periods in Denmark (my father is Indian and my mother is Danish). I have a masters degree in Business Administration from Copenhagen School of Business, and started my career with Procter and Gamble. I worked for the American consulting firm McKinsey for two and a half years, and later worked

for celebrity chef Claus Meyer (the Danish equivalent of Jamie Oliver). While I was on maternity leave, in early 2008, I had an interview with Bjarke Ingels, and I joined BIG in August 2008 as chief financial officer.

Why did you want to work for Bjarke Ingels?

I didn't know I did, to be honest. I'd never heard of him at that point, even though he was already quite well known within architecture and urban development.

When I met him though, it was apparent that he was unlike any other entrepreneur that I'd known. First of all, he was young – close to my age – and I also saw that he was quick to make decisions. That was appealing to me after having worked for corporate firms where decision-making was very slow. I also liked the fact that he seemed to give the people that worked with him a lot of trust and responsibility.

What shape was the practice in when you joined?

It was at the point when they had to start thinking about a financial model. There were about 50 people working for BIG at the time, including interns, and there were no partners – Bjarke was the sole owner.

I was given the task by Bjarke and his advisory board of turning it into a sustainable, healthy platform, and also of turning it into a partnership.

How did you approach the task?

It was pretty basic; it was just getting a handle on the pluses and minuses, looking through the projects we were working on and finding out whether clients had

Sheela Maini Seggaard
joined BIG in 2008
and was made chief
executive in 2009

PHOTO: FLEMING LEITROP



paid their bills. It was a small firm then, so it was quite easy to work out where we were losing money.

I contacted all the clients who owed us money, and engaged a no cure no pay collections firm to deal with those who wouldn't pay.

At the time it was completely incomprehensible to me why we'd work for people who hadn't agreed to the terms and conditions; why we'd hand over our intellectual property before we'd received payment. I understand it now, but at the time I was quite insensitive to the passion of being a very young firm excited about clients wanting to work with you.

How much of a challenge was the task of getting BIG's finances on track?

Early on, when I'd only been there for a few weeks, one of our clients wrote to Bjarke Ingels. This client owed us a lot of money – I'd been in correspondence with them saying if they didn't pay, we'd stop working with them and we'd pass the case over to a lawyer.

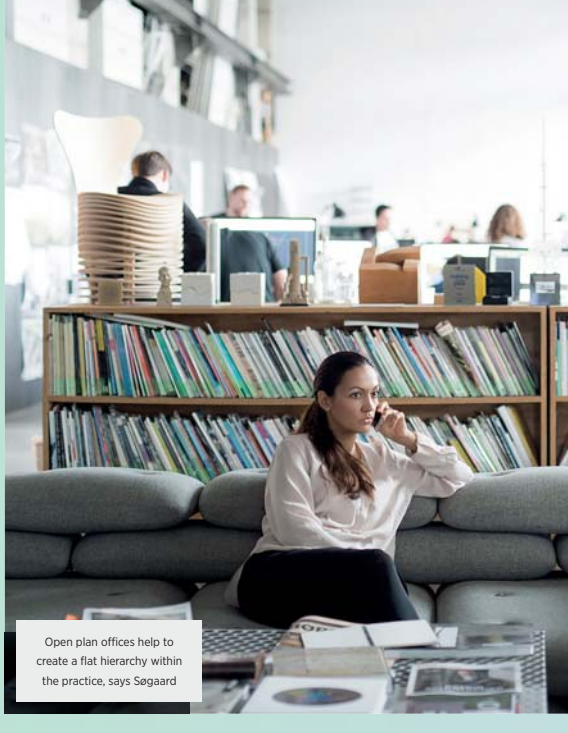
The client wrote Bjarke an angry letter saying, 'I don't even know this person. You've got to put a stop to this'. Bjarke passed the letter to me and asked me what to do. He was concerned because he had a relationship with the client and he wasn't sure how to respond.

I told him he had to say that he was happy to talk to them regarding the architecture, but otherwise they needed to deal with me.

That was a real shift; not just for our clients but also for Bjarke. It took a lot of strength to let go and let me take care of that side of the business.

What are the biggest challenges for BIG today?

There isn't always a direct correlation between the projects with a lot of prestige and impact, that you really want to engage with, and reasonable fees.



Open plan offices help to create a flat hierarchy within the practice, says Søgaard



We're constantly weighing up how much we want to do a project with the financial reward.

It's a challenge for the industry as a whole, the fact that for the really impactful projects – the cultural, educational projects that will really contribute to the community and will make a difference in the long term – it can be difficult to raise the money for fees and for the construction budget. I find that problematic.

How would you describe the culture at BIG?

One of the key things that differentiates BIG from other firms I've worked for, is the insistence on being playful and having fun.

None of us has our own office, so we all sit together, we're loud – very sort of Viking – we swear, we're inappropriate sometimes. This approach really eases the mood a lot.

It's really a juxtaposition, because we take ourselves so seriously in terms of what we do and in

Søgaard recently took part in a business talk in London offering advice to architects, along with Design Haus Liberty founder Dara Huang (centre) and Caroline Roberts, global head of people and talent at Zaha Hadid Architects (right)



PHOTO: MIKE VITA



PHOTO: HELMUND LITTE

terms of our contractual negotiations, but then we take ourselves so un-seriously in the celebrating we do and the mood in the office.

Were you surprised by the reaction to the photo Bjarke Ingels posted recently, which highlighted the fact that you're the only woman at partner level?

I was surprised by the reaction, but only because I hadn't properly considered how we plug into the overall gender debate. I have started to think about it differently, and to realise that this is something that warrants more attention.

I'm actually really glad that the media continues to confront us with this issue, because the truth is that when you look at the numbers of women in positions of power in business and architecture, we've got a long way to go. As a female CEO, I have an obligation to help find a way to address this issue that makes

When you look at the numbers of women in positions of power in business and architecture, we've got a long way to go

sense for us, where we don't feel that we're compromising values and promoting people just because of their gender, but really helping the talent to move up. I feel very confident that the path is there, and that we've begun this process.

When I look at the BIG landscape, more than half of our directors and managers are women. That in my mind shows that BIG actually is a place that offers people with talent and ambition a platform to rise regardless of gender or ethnicity.

What are your thoughts on the issue of the lack of ethnic diversity within architecture?

I think at BIG that's probably an area where we're actually ahead of the curve, having more than 40 different nationalities represented within the practice.

It's true that there are some nationalities that aren't represented well yet, and it's not getting easier with the visa tightening in the Americas and with Brexit, but I do think that diversity on that front is something that's very much part of our DNA, especially given our Scandinavian roots.

BIG has expanded quickly over the past few years. What are the challenges of this growth?

We've grown almost tenfold in the time I've been working for BIG. That means our way of working, our DNA, is spread across a larger population.

One of the really large focus areas for us is making sure that we permeate our new members with our way of thinking and working, both so that we maintain our culture and so that we continue to develop the kind of architecture that we want to deliver.

THE BIG TEAM

Bjarke Ingels credits BIG's enormous success to the creative team he has built around him, and the studio now has partners spread across the world. Each brings something markedly different to the table, as Kim Megson and Magali Robathan find out

PHOTO: FLEMING LETHBRUN



BJARKE INGELS ON FINN NORKJÆR

"We have great mutual respect. When he joined, he respected my ideas and sensibilities, and I admired his skill, ability to maintain an overview and experience."

Finn Norkjaer

Finn Norkjaer came onto the scene back in 2001, when Bjarke Ingels and Julien De Smedt had just won their first competition, for the Aquatic Center in Aalborg, Denmark. Norkjaer was working for the practice that came second in the competition – after reading through PLOT's winning entry, he became so fascinated by the scheme he gave Ingels a call.

It turned out that he lived just around the corner, so he went immediately to Ingels' house. "We talked until three o'clock in the morning," says Ingels. Shortly afterwards, Norkjaer left his job and went to work with Ingels and De Smedt.

Norkjaer is extremely detail-oriented, and has been in charge of the construction of most of BIG's

projects. Recent projects include Lego House, Gammel Hellerup Gymnasium, and the Tirtitz Museum, which opened in June in western Denmark next to an old WWII bunker.

"The Tirtitz Museum is very special," says Norkjaer, of the project. "We have created a very clean and simple building, and we've been very honest with the materials."

Norkjaer has a love for music, and started the BIG Band, a group of musicians that plays for fun and at BIG parties and events. "BIG is more than just a place to work; we're like family," says Norkjaer. "We're connected, but you can't be connected if you only talk about architecture. BIG Band is another way to communicate. It's very open hearted."

Tirtitz

Blavand, Denmark

OPENING DATE: JUNE 2017

BIG's transformation of a former German WWII bunker into a cultural complex camouflaged among the protected dunes of Blavand, western Denmark, opened in June.

Conceived as "a sanctuary in the sand," the 82,000sq m (882,600sq ft) museum consists of the bunker and a new museum exploring the region's history.

Upon arrival, visitors first see the bunker, which was one of hundreds of coastal defences built by the German army during the war as a defence against an invasion of Nazi-occupied Europe.

Beyond the bunker, the new museum emerges as a series of intersecting, precise cuts in the shoreland landscape – designed to contrast with the heavy volume of the wartime structure.

The complex is divided into four main underground galleries, each with their own rectangular-shaped space. These can be viewed and accessed from a central courtyard on ground level, with 6m-tall glass panels allowing natural light to flood into the interior spaces. A tunnel links the galleries with the back of the bunker.

The museum consists of four galleries, built into the surrounding sand dunes

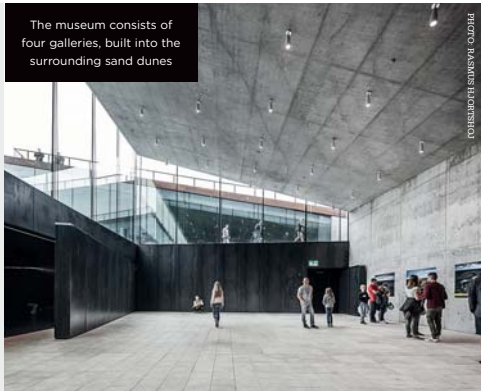


PHOTO: JASPER HJORTH

The towers' punched window openings reference the area's historic industrial buildings



The Eleventh

New York, US

OPENING DATE: 2020

Designed for real estate development and investment company HFZ, the Eleventh is a mixed use project composed of two 'twisting' towers between the High Line and the Hudson River in New York.

The twisting towers will house residential units and a 137-room Six Senses hotel, featuring a large spa.

Of the design, BIG said: "The geometry of the two towers is a direct response to the context. At

the base, the two towers pull away from each other and the neighbouring buildings to maximize urban space and views."

The project includes an art gallery, parking and retail space.

Thomas Christoffersen

Christoffersen was Ingels' student at the Art Academy in Copenhagen back in the PLOT days, and he also became the firm's first intern. He was involved in the early projects, including 8 House and VM House in Copenhagen, before moving to the States. When BIG was set up, he returned to Denmark to be part of the new practice.

"There wasn't a lot going on architecturally in Denmark at that time," says Christoffersen. "We

were rooted in the traditions of Danish design, but inspired by what was happening elsewhere, resulting in an architecture that was rather different from that of our colleagues."

Christoffersen is currently working on projects including the new Washington Redskins Stadium, 2 World Trade Center, the Eleventh in New York and a mixed use office, residential and hotel complex for LA's Art District.



BJARKE INGELS ON THOMAS CHRISTOFFERSEN

"Thomas is an old school architect with a capital A. He's a great form giver and has an amazing ability to discriminate between what's right and what's wrong, tectonically"



The city will feature a huge range of cultural, sporting, retail and leisure facilities



EUROPACITY

PARIS, FRANCE

COMPLETION DATE: TBC

BIG were chosen in 2013 to design EuropaCity, a huge leisure development on the outskirts of Paris covering more than 80 acres and offering a mix of retail, culture and leisure.

According to the architect: 'The programs of Europa City are organised along an internal boulevard with a mix of retail, entertainment and cultural programs on both sides. The boulevard forms a continuous loop travelling through the new neighbourhood, with visitors travelling along it by bike and electric public transport.'

PHOTO: TY STANGE



BJARKE INGELS ON ANDREAS KLOK PEDERSEN

"He's mercilessly honest. That sometimes might come across like he isn't the most diplomatic of all the partners, but you have the guarantee that he'll really speak his mind. That makes him a great critic and a great contributor."

Andreas Klok Pedersen

Andreas Klok Pedersen joined Ingels in 2004 during the PLOT days, straight after completing a Masters degree at the Aarhus School of Architecture.

"He helped us with an exhibition we were doing with Bruce Mau, applying design thinking at the scale of a country, in this case Denmark," says Ingels. "Andreas is a really good conceptual thinker and he doesn't get bogged down with little things. Together we ended up coining a lot of the ideas that have informed our practice for the following decade, including the terms 'pragmatic utopia' and 'hedonistic sustainability'".

Based in BIG's Copenhagen office, Pedersen oversees conceptual designs, competition entries and large-scale masterplans

– including EuropaCity in Paris and Loop City for the Danish capital.

"I'm excited about the way we're starting to broaden our work," he says. "We're looking into engineering, sustainability, product design, development, investment. We have really good experience and expertise to be dealing with projects beyond buildings."

"I think my strength is discovering new talent," he adds. "I like to bring new people to the office and develop the culture of skills and creativity we have here."

Pedersen is also the partner who's not afraid to say no. "I'm quite critical," he admits. "I say no more than yes. You need both sides – people presenting ideas and people not afraid to say if the idea isn't good."

PHOTO: FLEMMING LERSTOFF



Kai-Uwe Bergmann

When Bergmann first met Ingels at the Venice Biennale in 2004, the two seemed destined to collaborate as Bergmann was planning his move to Copenhagen that same year. They met up again and Bergmann brought along his portfolio. "It was a funky combination of glass blowing and a clay temple in Central Africa. I really liked Kai and offered him a job," says Ingels.

Bergmann is head of business development, or as Ingels refers to him, "BIG's foreign minister". He also spearheads BIG Landscape and works on BIG's Urbanism projects. Recent examples include the Pittsburgh Lower Hill masterplan, the Smithsonian Institute campus overhaul and the BIG U, BIG's leisure-orientated storm barrier for Lower Manhattan.

"BIG U is us starting the foundation work for a future resilient city," says Bergmann. "What we're looking for is investment in flood protection

– we asked ourselves: instead of just having a basic grey floodwall, could we raise the quality of life in these neighbourhoods by leveraging the flood protection investment to create parks? We asked the people who lived there what they lacked most, and they all put open green space as their number one choice."

Bergmann also takes his role as the BIG culture ambassador seriously, ensuring that 'BIGsters' share their knowledge through BIG schools, are inspired through the BIG Picture lecture series, enjoy BIG study trips and above all stay in touch with the global network of 'BIGster' alumni everywhere.

One of Bergmann's favourite experiences with BIG was cycling from Mendoza, Argentina, over the Andes to the coast of Chile in 2004. "We spent six days, all together. It was an endurance; up to 200km a day, uphill, but it was absolutely amazing," he says.



BJARKE INGELS ON KAI-UWE BERGMANN

"Kai-Uwe is a unique blend of American extroversion and Germanic structure, which makes him a force of nature as a networker. His secret strength is his endurance and ability to take on and manage the complexities of creating opportunities for us. It's liberating!"

THE BIG U

NEW YORK, US

COMPLETION DATE: PHASE ONE 2024/2025

Developed in collaboration with New York City, the BIG U proposal was developed to protect Lower Manhattan from floods, storms and other impacts of climate change. A storm barrier-cum leisure amenity, it stretches around Manhattan from West 54th street south to The Battery and up to East 40th street: a high water barrier incorporating public space with parks, seating, bicycle shelters, sports facilities and skateboard ramps.

The architect says of the project: 'The BIG U consists of multiple but linked design opportunities; each on different scales of time, size and investment; each local neighbourhood tailoring its own set of programs, functions, and opportunities.'



The BIG U high water barrier is 16km long, and incorporates community facilities

'Small, relatively simple projects maintain the resiliency investment momentum post-Sandy, while setting in motion the longer-term solutions that will be necessary in the future.'



PHOTO: UNIVERSITY OF AARHUS

David Zahle

Zahle joined BIG as an intern in the early days, and helped win the practice its first major commission when he met the Danish developer Per Hopfner in his friend's backyard. On learning Hopfner was a developer, Zahle outlined BIG's ambitions and invited him to the office to find out more.

"I called him up a week later and asked if he wanted to drop by," says Zahle. "He said he'd be there in 15 minutes. At the time there were only nine of us, we didn't have a receptionist and everything was a total mess. We frantically cleaned up and then showed him around. We had no built work at all, but he must have seen something in us, because he asked if we could design a housing project for him."

This led to BIG's first assignment, the VM Houses in Copenhagen, and the

collaboration with Hopfner continued with the Mountain and the 8 House.

For Zahle, he knew that BIG was the place for him when the practice won the competition for the Danish Maritime Museum in Helsingør. "We decided that I should be the project manager, even though you'd normally be expected to have 10 years experience for the role. I realised we'd created an environment where it was more about talent and trust than how much experience you had.

"It was a turning point for me, realising that, here, I can basically do anything." Zahle is currently involved with several BIG projects in the Nordics and is overseeing the business development of BIG's Scandinavian projects. Projects include the Amager Resource Center, the Panda House at Copenhagen Zoo and Kistefos Museum, Norway.

6

BJARKE INGELS ON DAVID ZAHLE

"David is a real people person. He's great at relating to people internally and externally. I think he acknowledges the significance of that in architecture. It's a very important skill."

The Panda House features separate spaces for the male and female pandas



Panda House

Copenhagen, Denmark

OPENING DATE: 2019

BIG's design for the new Panda House at Copenhagen Zoo begins with a circular shape, formed by the zoo's surrounding facilities at the intersection of multiple walkways. Panda House is designed to feel like humans are the visitors in the pandas' home, rather than pandas being the 'exotic guests from faraway lands'.

The habitat has been designed to closely resemble the pandas' natural habitat. The architect said of the design: 'It forms the freest and most naturalistic possible environment for the pandas' lives and relationships with each other, providing the freedom to roam about and the ideal conditions to mate – one of the major challenges facing pandas.'



Passengers could travel from Dubai to Abu Dhabi in 12 minutes



Virgin Hyperloop One United Arab Emirates

COMPLETION DATE: 2021

BIG have teamed up with Virgin Hyperloop One, the LA company racing to be the first to realise Elon Musk's high speed, pressurised tube transport system.

Last November, BIG and Hyperloop One unveiled joint designs for the transport system in Dubai, as Hyperloop One announced that it had signed a deal with the Dubai Roads and Transport Authority to develop a passenger and cargo network in the United Arab Emirates.

The main objective of BIG's concept is to eliminate waiting from the passenger experience. Passengers enter portals (stations) where a simple numbering system allows them to quickly identify their departure gate. Passengers will travel in pods that have room for six people and that move on regular roads and can pick up passengers at any point.

The pods are contained within a transporter, a pressure vessel attached to a chassis for levitation and propulsion that can accelerate the transporter to 1,100km/h. Passengers board the next available pod, which moves onto a transporter to their final destination. Different interior environments and seating arrangements offer passengers a travel experience tailored to their needs.

Jakob Lange

"I've always been a bit of an inventor type," says Jakob Lange, head of BIG Ideas, BIG's technology-driven special projects unit.

Lange founded BIG Ideas in 2014, when BIG's plan to blow smoke rings from the Amager Resource Center hit a brick wall.

"At a partner meeting in Texas, we decided I'd get \$15,000 to figure out how to solve the problem," says Lange. "Within that budget I found the right people and built a prototype that blew steam rings instead of smoke. The moment when we generated the first steam ring was insane. I was screaming out loud - it was impossible to hold back. This was something that had never been done before."

BIG Ideas' highest profile project is its work with Virgin Hyperloop One, the LA company racing to build the world's

first high-speed transportation system.

"Our initial role was to be the architect and the designers of the stations and user experience," he says. "This has developed and we're now close advisors to Virgin Hyperloop One. We know everything there is to know about the Hyperloop system."

For Lange, a technology-obsessed, future-orientated inventor, Hyperloop is something of a dream project.

"We're moving into the realm of shaping the future with Virgin Hyperloop One," says Lange. "Because Hyperloop hasn't been realised yet, everything we do now will determine what mobility will look like in the future."

Lange has worked with Ingels since 2003. Right now he's racking up frequent flier miles for travelling to the Middle East in connection with BIG Ideas' latest challenge: Mars Science City.



BRUNEL UNIVERSITY, UOLDBA



BJARKE INGELS ON JAKOB LANGE

"Jakob has a tinkerer's attitude: if he doesn't know how to do something, he'll look it up and learn it. He has the patience to drill into very specific things and make them work"



Google HQs

London, UK &
California, US

COMPLETION DATES: 2025

BIG and Heatherwick Studio have joined forces to design Google headquarters in Kings Cross, London and Mountain View, California.

The London HQ features a vast rooftop garden across multiple storeys; a sports hall; a 200m-long running track for employees; a promenade looking out towards the station; and a wellness centre containing gyms and massage rooms and a swimming pool.

The California HQ, meanwhile, is made up of a series of rooms, or 'pavilions,' sheltered beneath a giant tent-like roof canopy, with the offices on the first floor and the public programmes at ground level. A 'green loop' or pedestrian and cycle pathway, runs through the centre of the building.

BIG's design for Google's Charleston East Campus aims to foster a sense of community



Daniel Sundlin

"I've always been interested in visual communication on one hand, and in issues of social consciousness on the other hand," says Sundlin, who joined BIG as an intern in 2008. For the first three years, he worked full time at BIG while also studying full time at the Royal Academy of Arts in Copenhagen. As Ingels says, of Sundlin: "He's got one hell of a work ethic."

Sundlin's responsibilities as a lead designer include communicating BIG's architecture through different media. "What defines BIG's style of visual communication is that our diagrams clearly capture the essence of our projects, meaning that it's very easy for people who don't know our projects well to understand them," he says. "That's so

important in a collaborative process."

Sundlin is partner in charge of Google's new headquarters in Mountain View, California, a collaboration between BIG and Heatherwick Studio. The designs show a series of pavilions at ground level, housed under a huge, tent-like canopy. The 'green loop' – a circuit for cyclists and pedestrians that will run through the new building – is an integral part of the design. "You can bike and walk through the building and take part in one of the leisure activities going on in the courtyards along the route, says Sundlin. "We felt that this was a great way of bringing together the community and making it feel less like a corporate campus."



BJARKE INGELS ON DANIEL SUNDLIN

"Daniel is blessed with a divine talent for creativity. More than most architects, he has access to the raw source of creativity. He's such a goddamn natural-born talent"

ALL IMAGES BY BIG UNLESS OTHERWISE CREDITED

VIA 57 West's residential units surround a central courtyard garden



VIA 57 West

NEW YORK, US

OPENING DATE: 2016

BIG's first completed project in New York opened in 2016. Described by the architect as a 'hybrid between the European perimeter block and a traditional Manhattan high-rise,' the building features 709 residential units arranged around a courtyard garden with the same proportions as Central Park.

The form of the building shifts depending on the viewer's vantage point. While appearing like a pyramid from the West-Side-Highway, it turns into a dramatic glass spire from West 58th Street. The sloping roof consists of a simple ruled surface perforated by terraces – each one unique and south-facing. Every apartment has a bay window, and balconies encourage interaction between residents and passers-by.



PHOTO: THE ARCHITECTS



Beat Schenk

Beat Schenk started out working for Frank Gehry's office in Los Angeles, before moving to Europe. He first met with Ingels when both were working under Rem Koolhaas at OMA, and the pair collaborated together on the acclaimed Seattle Public Library project.

"Bjarke was this young kid, quite brash and totally insane, but with really good energy, directing the team about what to do next," Schenk remembers. "We connected right away."

He turned down the chance to join Ingels in the early days of PLOT due to family commitments, but was given a second opportunity when BIG won the VIA 57 West project in New York and were preparing to establish an office in the city. This time he agreed readily.

"When we started we were leasing a couple of desks and had 12 people," he says.

"We're about to make our fifth move since then. I don't think anyone would have guessed we'd have grown to more than 200 people so quickly."

Schenk, who has been an architect since 1986, has a lot of technical experience and is closely involved in the latter stages of almost every project the office develops.


Speaking about what has made BIG so successful, Schenk says: "There's a lot of laughter and togetherness, which we encourage. It's a cliché, but if you're happy as a person you're more likely to put in the sweat and effort required."

"Bjarke has put together a group of talented people whom he feels really comfortable with and trusts not to mess up. That's the difference between what I experienced at other offices, where you had one master leading everything."



BJARKE INGELS ON BEAT SCHENK

"He's an amazing character and the person I've known longest in the office. He has so much talent and knowledge. He's very demanding of everyone around him, but no more demanding than he is of himself."



The 85m-high sloped roof at the Amager Resource Center doubles as a ski slope

PHOTO: JENSEN LANGRUP

Amager Resource Center

Copenhagen, Denmark

OPENING DATE: 2018

The BIG-designed Amager Resource Center is a combined waste-to-energy plant and ski centre located in an industrial area of Copenhagen that's being transformed into an

extreme sports destination. The 85m-high building will act as a 'mountain' for Copenhagen, with an artificial ski slope on its roof, a climbing wall on one facade and a rooftop hiking trail.

As a way of raising awareness about climate change, the plant's chimney will emit giant steam rings to illustrate the amount of carbon dioxide being generated by the factory.



Brian Yang

US born Yang studied at The Harvard Graduate School of Design, where he applied to BIG for an internship and then coincidentally found out that Bjarke Ingels was one of the examiners for his final review. "It turned very quickly into a de facto job interview," says Yang. "I guess it went well because that summer I ended up at BIG."

Yang has been with BIG since 2007, and has worked on a wide range of projects including the Lego House, the Amager Resource Center, Tirpitz Museum and the Shenzhen Energy Mansion.

Yang particularly enjoys what he describes as the conscious naivete of BIG's approach to architecture, as well as the socially level atmosphere at the practice. "Day to day, there's no real hierarchy in the office," he says. "There is for decision making, because you need that, but it doesn't influence who speaks in a design

meeting. You can be an intern on your first day and be expected to contribute to the design conversation. That's something driven strongly by Bjarke."

Yang was project leader for the competition phase of the Amager Resource Center, and remembers the idea of putting a ski slope on the roof of the building as being born from "the sheer anxiety of having to submit something brilliant in a very short timescale."

"We didn't have a scheme until about two weeks before the submission date," he says. "We sat down with the team to discuss what the hell we were going to do. Someone mentioned the fact that Denmark is flat and that Danes drive three hours to Sweden to ski there, and Bjarke said, 'We have to do a ski slope on top of the factory'. I remember that moment – all of a sudden the energy in the room turned."

Brian Yang married fellow BIG employee Cat Huang in Texas in 2013.



BJARKE INGELS ON BRIAN YANG

"He's a Swiss Army knife of an architect. He really has the ability to command the room and he has such a professional attitude to architecture."



BJARKE INGELS ON JAKOB SAND

"He has this amazing ability to take ownership of projects without taking away any space from his team. He allows his team members to grow under his wing, not to fall under his shadow and he allows everyone to shine."

Jakob Sand

Jakob Sand left his native Denmark in the early 2000s to work in Paris, first with Odile Decq and then with Dominique Perrault. Eventually he returned to Copenhagen, where mutual friends introduced him to BIG partner David Zahle.

The studio had just won a project to expand the University of Jussieu in Paris, and were seeking a French-speaking architect to oversee the project.

"It was the beginning of a French adventure for BIG," Sand says.

In the intervening years, he has led projects such as the MÉCA Cultural Center in Bordeaux, the Pont de Bondy metro station in the capital, and the Europa City Masterplan. He has also helped win competitions in Denmark, Sweden and the UK.

"We have some partners with a very clear profile and specific focus

areas but my role is more versatile," he says. "This morning I worked on a competition, this afternoon I went to a construction site, tomorrow I'm focusing on business development. Architecture happens until the day you deliver the project, and I love being involved in every phase."

Sand liaises closely with local architects in France, and he says the close relationship between BIG and its collaborators around the world is why it has been so successful globally.

Reflecting on what else makes BIG tick, he says: "We all have a curiosity to explore new ideas and we don't have a singular style by which we define ourselves.

"Maybe a project ends up looking like a BIG building, but there's no blueprint. If you have a good idea, we will look at it, whether you're an intern or a partner." ●



MECA

BORDEAUX, FRANCE

OPENING DATE: 2019

BIG teamed up with French studio FREAKS freearchitects to create the Maison de l'Économie Créative et de la Culture en Aquitaine (MÉCA).

This project brings together three cultural institutions into one building: FRAC (the Aquitaine Regional Fund for Contemporary Art), ECLA (the Cultural Agency for Writing, Music, Film & Broadcasting), and OARA (the Artistic Office of the Aquitaine Region for performing arts).

BIG's design is for a building integrated with Bordeaux's waterfront promenade, that allows public life to 'flow through' the MÉCA. The three institutions and their shared facilities are gathered around a public space, or 'outdoor urban room,' which can be used as a stage or outdoor gallery.

The three cultural organisations are set around a flexible public space



**WE ARE
DEDICATED
TO DESIGN
EXPERIENCE**

TESTED DESIGN EXPERIENCE!

ALL **Polin Waterparks'** RIDES
ARE ENGINEERED FOR MAXIMUM SAFETY
WITH THE HIGHEST LEVEL OF EXPERTISE
AND STATE-OF-THE-ART SOFTWARE.

OUR INGENIOUS CREATIVE STAFF
WITH THE COLLABORATION OF TALENTED ENGINEERS
AND PROFESSIONALS HAVE COMPLETED
3,000 SUCCESSFUL WATERPARK PROJECTS
AND MANY SIGNATURE WATER SLIDES
IN **103** COUNTRIES WORLDWIDE.

WE ARE DEDICATED
TO DESIGN EXCITEMENT, JOY, THRILLS
AND ADRENALINE - PUMPING FUN.

WE CALL IT AN **EXPERIENCE.**

MEET THE EXPERIENCE

AT IAAPA ATTRACTIONS EXPO.

Polin Waterparks' BOOTH #1378

14-17 NOVEMBER 2017

ORLANDO, FL, USA

follow us on
fb / tw / in / yt / ig
[@polinwaterparks](#)
polin.com.tr



PolinWaterparks

World's Leading Waterpark Supplier

CLADkit

The biggest news from the world of product design, from actor Terry Crews' furniture collection to a lighting range launched by Richard and Ana Meier



For full company and contact details of any of the products and services featured here, please visit www.CLAD-kit.net

IMAGE STUDIO PIRPHERY



• WOHAtest founders Richard Hassell and Wong Mun Summ



• Oli is a range of glassware and lighting created with WonderGlass

WOHAtest launch their own luxury lifestyle collection

WOHAtest, the architecture and design firm behind some of the world's most luxurious hotels, have launched WOHAtest, a lifestyle line of their furniture, rugs, lighting, bath and tableware.

It consists of six collections: Bintan, Ulu, Corak, Oli, Diaspora, and Sampan. Bintan is a furniture collection consisting of tables, chairs, and lighting. Inspired by the Indonesian island of the same name, it features tropical, hand-printed upholstery and is available with either slender metal bases or chunkier wooden legs.

Ulu features both indoor and outdoor furniture, originally designed for the Alila Villas Uluwatu resort in Bali; Corak

is a collection of rugs incorporating traditional Asian patterns and textures; and Diaspora, launching later this year, is a range of bone china tableware designed with ceramic manufacturer luzerna.

Sampan is a bathroom range that mimics the angular shape of traditional boats found in Singapore.

WOHAtest co-founder Richard Hassell said: "We have created objects for our architectural projects for a very long time but never made them available for a retail market before."

MORE ON CLAD-KIT:

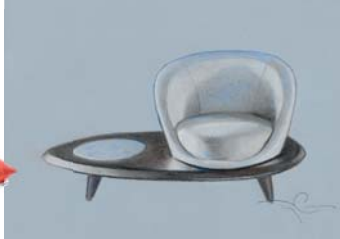
<http://lei.sr?a=U8w7M>

• The Bintan collection is inspired by an Indonesian island

WOHAtest is the result of over 20 years of designing buildings, and as a natural extension of that, furniture and other home accessories

Richard Hassell





- Lilypad is a small armchair on a low walnut table, and was inspired by an Egyptian god

Terry Crews partners with Bernhardt Design for collection



Former NFL player and Hollywood actor Terry Crews has created a furniture collection with American furniture company Bernhardt Design.

The Terry Crews Collection is a modern take on Ancient Egyptian luxury, and consists of five unique pieces: Ibis, Float, Aire, the Lily and Lilypad.

Ibis is a sofa, inspired by the Sacred Ibis found in ancient Egyptian hieroglyphics, and is designed to resemble the extended wings of a bird. It is available in two sizes: standard and grand.

Float and Aire are a range of tables and benches designed to resemble rocks and pebbles found along the shore of the Nile. They feature an irregular shape to give them the appearance of having been organically shaped over thousands of years. The Float table is available in four different sizes, and is made from American Walnut and features a distinctive bevelled edge.

The Aire benches feature an upholstered seat with a saddle stitch cross design across the top and are available in three different sizes.

The Lily is an armchair designed to resemble a blooming lotus flower, while Lilypad is a smaller version positioned on a low walnut table and influenced by images of the Egyptian sun god Horus sitting on a blue water lily.

The entire range is available in a wide variety of customisable upholstery options and finishes.

Crews said: "When I began I was very aware of the significant influence of many modern contemporary designers like Le Corbusier and Charles and Ray Eames. My mind really started to expand when I began to explore fantasy elements of other cultures. I envisioned what modern contemporary furniture would look like if Egypt was the dominant world power: What would an evening in a luxurious, modern Egyptian palace look like?"

- Terry Crews is an actor, a former NFL player and now a furniture designer

- Many of the designs are inspired by water and the Nile River

My mind really started to expand when I began to explore fantasy elements of other cultures

Terry Crews

MORE ON CLAD-KIT:

<http://lei.sr?a=t8X5K>



FaulknerBrowns and Polin creating waterpark next to 800 year-old church tower



It's a game-changer in its distinctive design. The team was required to fit the facility into a very tight footprint

Polin's Bilge Pakis

Waterslide manufacturer Polin is collaborating with architecture firm FaulknerBrowns to create an indoor waterpark in the British city Coventry, located next to a church spire dating from the Middle Ages.

The Christchurch Tower originally formed part of a larger cruciform church that was destroyed in the dissolution of the monasteries in the 1500s, and was one of three historic spires bombed during the Coventry Blitz in 1941.

Coventry City Centre Leisure Park is set to open next to the tower in early 2019. It will feature an indoor waterpark, a 25m pool, a gym, a climbing wall, squash courts, a dance studio and a day spa.

Occupying a relatively small footprint, the facility has been specially designed to reflect the dimensions of the spire, and the waterpark will feature a range of slides specially adapted for the reduced space.



IMAGE: PAUL BRENNING/NEWS

The biggest slide, the Space Hole, will stand 14.62 m (48 ft) high, with the other slides measuring 11.5 m (37.7 ft).

Buckingham Group Contracting is the main contractor. Waterpark specialist Neuman Aqua is also collaborating.

- People using the Leisure Park will look out towards the city and spire

MORE ON CLAD-KIT:
<http://lei.sr?a=E4t8r>

Tom Fereday Designs launch 3D printed light

The light's detailed surface would be very difficult to replicate through traditional ceramic making processes

Tom Fereday



Australian architect Tom Fereday has debuted the PELO light, a 3D printed, pendant light, made in partnership with ceramic artist and academic Susan Chen.

The light was built using a ceramic printer developed by Chen, and takes just two and a half hours to print. It features a conical shade, made from a single extrusion of clay, with distinctive ridges, created by the clay twisting on top of itself during the printing process.

Chen, who has recently completed master's research in the application of 3D printing to ceramics, oversaw the development of the light and ensured the design was viable, while Fereday designed the individual components and assembly.

Fereday said: "We attempted to create a product driven by the process of 3D printing and not simply made to create a shape that might otherwise be complex to make. It elegantly shows the natural variation of the printing process itself." ●

MORE ON CLAD-KIT:
<http://lei.sr?a=r9r1N>



- Earthenware and porcelain prototypes were created for the light by Fereday and ceramic artist and academic Susan Chen



*Sparcstudio deliver **inspiring, innovative & award winning** spa, wellness & hotel design with a real attention to detail. Our bespoke design approach combined with a deep understanding of the technical & operational issues ensures long lasting & unique spas that continue to win awards year after year.*



OUR CLIENTS INCLUDE:

THIRD SPACE, DORMY HOUSE SPA, EXCLUSIVE HOTELS, AB HOTELS SPA AT SOPWELL HOUSE, CALCOT MANOR HOTEL & SPA, SO SPA SOFITEL ST JAMES, ROCKCLIFFE HALL SPA

CONTACT US

EMAIL beverley@sparcstudio.co.uk TELEPHONE +44(0)203 637 5997

www.sparcstudio.co.uk

Sleep

The Hotel Design Event

For brilliant
experiences



21–22 November 2017
The Business Design Centre, London

Register free at thesleepevent.com

Founder Partner:



Official Media Partner:

SLEEPER
GLOBAL HOTEL DESIGN

Official Partner:

AHEAD
AMERICAS ASIA EUROPE MEA

Supported By:

BCFA
BUSINESS COUNCIL OF FOREIGN ARCHITECTS

Organised By:

