

= Bjarke Ingels =

Bjarke Bundgaard Ingels (Danish pronunciation : [?b ? j??g ? ? ?b ? ?ng ? ??? ?e??l ? s] ; born 2 October 1974) is a Danish architect . He is the founder and creative partner of Bjarke Ingels Group (BIG) since 2005 . He is known for buildings that defy traditional architectural conventions and dimensions , ranging from representations of mountains to snowflakes . His designs incorporate sustainable development ideas and sociological concepts , along with sloped lines that are shaped to their surroundings .

In Denmark , he became known for designing two housing complexes in Ørestad : VM Houses and Mountain Dwellings . In 2006 he started his own architecture firm , Bjarke Ingels Group , which grew to a staff of 400 by 2015 . Some of their best known projects are the 8 House housing complex , a zero @-@ emission resort on Zira Island in Azerbaijan described as " one of the world 's largest eco @-@ developments " , the VIA (West 57) apartments in Manhattan , the Google North Bayshore headquarters (co @-@ designed with Thomas Heatherwick) , the Superkilen park ; and the Amager Bakke waste @-@ to @-@ energy plant .

Since 2009 , Ingels has won numerous architectural competitions . In October 2011 , the Wall Street Journal named him the Innovator of the Year for architecture . He moved to New York City in 2012 , where in addition to the VIA apartments , BIG won a design contest for improving Manhattan 's flood resistance after Hurricane Sandy , and are designing the new Two World Trade Center building .

== Early life and background ==

Ingels was born in Copenhagen in 1974 to an engineer father and a dentist mother . Hoping to become a cartoonist , he began to study architecture in 1993 at the Royal Danish Academy of Fine Arts as he thought it would help him to improve his drawing skills . Only after he had been studying for a couple of years did he really take an interest in architecture . He continued his studies at the Escola Tècnica Superior d 'Arquitectura in Barcelona , and returned to Copenhagen to receive his diploma in 1999 . As a third @-@ year student in Barcelona , he set up his first practice and won his first competition .

Alongside his architectural practice , Ingels has been a Visiting Professor at the Rice University School of Architecture , the Harvard Graduate School of Design , the Columbia University Graduate School of Architecture , Planning and Preservation , and mostly recently , the Yale School of Architecture .

== Career ==

=== 1998 ? 2005 ===

From 1998 to 2001 , Ingels worked for Rem Koolhaas at the Office for Metropolitan Architecture in Rotterdam . In 2001 , he returned to Copenhagen to set up the architectural practice PLOT together with Belgian OMA colleague Julien de Smedt . The company received national and international attention for their inventive designs . They were awarded a Golden Lion at the Venice Biennale of Architecture in 2004 for a proposal for a new music house for Stavanger , Norway .

PLOT completed a 2 @, @ 500 m2 (27 @, @ 000 sq ft) series of five open @-@ air swimming pools , Islands Brygge Harbour Bath , on the Copenhagen Harbour front with special facilities for children in 2003 . They also completed Maritime Youth House , a sailing club and a youth house at Sundby Harbour , Copenhagen .

The first major achievement for PLOT was the award @-@ winning VM Houses in Ørestad , Copenhagen , in 2005 . Inspired by Le Corbusier 's Unité d 'Habitation concept , they designed two residential blocks , in the shape of the letters V and M (as seen from the sky) ; the M House with 95 units , was completed in 2004 , and the V House , with 114 units , in 2005 . The design places

strong emphasis on daylight , privacy and views . Rather than looking over the neighboring building , all of the apartments have diagonal views of the surrounding fields . Corridors are short and bright , rather like open bullet holes through the building . There are some 80 different types of apartment in the complex , adaptable to individual needs . The building garnered Ingels and Smedt the Forum AID Award for the best building in Scandinavia in 2006 . Ingels lived in the complex until 2008 when he moved into the adjacent Mountain Dwellings .

In 2005 , Ingels also completed the Helsingør Psychiatric Hospital in Helsingør , a hospital which is shaped like a snowflake . Each room of the hospital was specially designed to have a view , with two groups of rooms facing the lake , and one group facing the surrounding hills .

= = = 2006 ? 2008 = = =

After PLOT was disbanded at the end of 2005 , in January 2006 Ingels made Bjarke Ingels Group (BIG) its own company . It grew to 400 employees by 2016 .

BIG began working on the 25 @-@ metre @-@ high (82 ft) Mountain Dwellings on the VM houses site in the Ørestad district of Copenhagen , combining 10 @,@ 000 m2 (110 @,@ 000 sq ft) of housing with 20 @,@ 000 m2 (220 @,@ 000 sq ft) of parking and parking space , with a mountain theme throughout the building . The apartments scale the diagonally sloping roof of the parking garage , from street level to 11th floor , creating an artificial , south facing ' mountainside ' where each apartment has a terrace measuring around 93 m2 (1 @,@ 000 sq ft) . The parking garage contains spots for 480 cars . The space has up to 16 @-@ metre @-@ high (52 ft) ceilings , and the underside of each level of apartments is covered in aluminium painted in a distinctive colour scheme of psychedelic hues which , as a tribute to Danish 1960s and ' 70s furniture designer Verner Panton , are all exact matches of the colours he used in his designs . The colours move , symbolically , from green for the earth over yellow , orange , dark orange , hot pink , purple to bright blue for the sky . The northern and western facades of the parking garage depict a 3 @,@ 000 m2 (32 @,@ 000 sq ft) photorealistic mural of Himalayan peaks . The parking garage is protected from wind and rain by huge shiny aluminium plates , perforated to let in light and allow for natural ventilation . By controlling the size of the holes , the sheeting was transformed into the giant rasterized image of Mount Everest . Completed in October 2008 , it received the World Architecture Festival Housing Award (2008) , Forum AID Award (2009) and the MIPIM Residential Development Award at Cannes (2009) . Dwell magazine has stated that the Mountain Dwellings " stand as a beacon for architectural possibility and stylish multifamily living in a dense , design @-@ savvy city . "

Their third housing project , 8 House , commissioned by Store Frederikslund Holding , Høpfner A / S and Danish Oil Company A / S in 2006 and completed in October 2010 , was the largest private development ever undertaken in Denmark and in Scandinavia , combining retail with commercial row houses and apartments . It is also Ingels ' third housing development in Ørestad , following VM Houses and Mountain Dwellings . The sloping , bow @-@ shaped 10 @-@ storey building consists of 61 @,@ 000 m2 (660 @,@ 000 sq ft) of three different types of residential housing and 10 @,@ 000 m2 (110 @,@ 000 sq ft) of retail premises and offices , providing views over the fields and marches of Kalvebod Fælled to the south . The 476 @-@ unit apartment building forms a figure 8 around two courtyards . Noted for its green roof which won it the 2010 Scandinavian Green Roof Award , Ingels explained , " The parts of the green roof that remain were seen by the client as integral to the building as they are visible from the ground . These not only provide the environmental benefits that we all know come from green roofs , but also add to the visual drama and appeal of the sloping roofs and rooftop terrace in between . " The building also won the Best Residential Building at the 2011 World Architecture Festival , and the Huffington Post included 8 House as one of the " 10 Best Architecture Moments of 2001 ? 2010 . "

In 2007 , Ingels exhibited at the Storefront for Art and Architecture in New York City and was commissioned to design the Danish Maritime Museum in Helsingør . The current museum is located on the UNESCO World Heritage Site of nearby Kronborg Castle . The concept of the building is ' invisible ' space , a subterranean museum which is still able to incorporate dramatic use of daylight .

In launching the \$ 40 million project , BIG had to reinforce an abandoned concrete dry dock on the site , 150 metres (490 ft) long , 25 metres (82 ft) wide and 9 metres (30 ft) deep , building the museum on the periphery of the reinforced dry dock walls which will form the facade of the new museum . The dry dock will also host exhibitions and cultural events throughout the year . The museum 's interior is designed to simulate the ambiance of a ship 's deck , with a slightly downward slope . The 7 @, @ 600 m2 (82 @, @ 000 sq ft) exhibition gallery is to house an extensive collection of paintings , model ships , and historical equipment and memorabilia from the Danish Navy . Ingels is collaborating with consulting engineer Rambøll , Alectia for project management , and E. Pihl & Søn and Kossmann.dejong for construction and interior design . Some 11 different foundations are funding the project . Construction began on the museum in September 2010 and it is scheduled for completion by the summer of 2013 . In September 2012 , the Kronborg and Zig @- @ Zag Bridge components to the building were shipped in from China .

= = = 2009 ? present : international scope = = =

Ingels designed a pavilion in the shape of a loop for the Danish World Expo 2010 pavilion in Shanghai . The open @- @ air 3 @, @ 000 m2 (32 @, @ 000 sq ft) steel pavilion has a spiral bicycle path , accommodating up to 300 cyclists who experience Danish culture and ideas for sustainable urban development . In the centre , amid a pool of 1 million litres (264 @, @ 172 gallons) of water , is the Copenhagen statue of The Little Mermaid , paying homage to Danish author Hans Christian Andersen .

In 2009 , Ingels designed the new National Library of Kazakhstan in Astana located to the south of the State Auditorium , said to resemble a " giant metallic doughnut " . BIG and MAD designed the Tilting Building in the Huaxi district of Guiyang , China , an innovative leaning tower with six facades . Other projects included the city hall in Tallinn , Estonia , and the Faroe Islands Education Centre in Torshavn , Faroe Islands . Accommodating some 1 @, @ 200 students and 300 teachers , the facility has a central open rotunda for meetings between staff and pupils .

In 2010 , Fast Company magazine included Ingels in its list of the 100 most creative people in business , mentioning his design of the Danish pavilion . BIG projects became increasingly international , including hotels in Norway , a museum overlooking Mexico City , and converting an oil industry wasteland into a zero @- @ emission resort on Zira Island off the coast of Baku , Azerbaijan . The 1 @, @ 000 @, @ 000 m2 (11 @, @ 000 @, @ 000 sq ft) resort started construction in 2010 , and represented the seven mountains of Azerbaijan . It was cited as " one of the world 's largest eco @- @ developments . " The " mountains " were covered with solar panels and provide for residential and commercial space . According to BIG , " The mountains are conceived not only as metaphors , but engineered as entire ecosystems , a model for future sustainable urban development " .

In 2011 , BIG won a competition to design the roof of the Amagerforbrænding industrial building , with 31 @, @ 000 m2 (330 @, @ 000 sq ft) of ski slopes of varying skill levels . The roof is put forward as another example of " hedonistic sustainability " : designed from recycled synthetics , aiming to increase energy efficiency by up to 20 percent . In October 2011 , the Wall Street Journal named Ingels the Innovator of the Year for architecture , later saying he was " becoming one of the design world 's rising stars " in light of his portfolio .

In 2012 , Ingels moved to New York to supervise work on a pyramid @- @ like apartment building on West 57th Street , a collaboration with real estate developer Durst Fetner Residential . BIG opened a permanent New York office , and became committed to further work in New York . By mid @- @ 2012 that office had a staff of 50 , which they used to launch other projects in North America . In 2014 Ingels 's design for an integrated flood protection system , the DryLine , was a winner of the Rebuild By Design competition created by the Department of Housing and Urban Development in the wake of Hurricane Sandy . The DryLine will stretch Manhattan 's shoreline on the Lower East Side , with a landscaped flood barrier in East River Park , enhanced pedestrian bridges over the FDR drive , and permanent and deployable floodwalls north of East 14th Street .

BIG designed the Lego House that began construction in 2014 in Billund , Denmark . Ingels said of it , " We felt that if BIG had been created with the single purpose of building only one building , it

would be to design the house for Lego . " Designed as a village of interlocking and overlapping buildings and spaces , the house is conceived with identical proportions to the toy bricks , and can be constructed one @-@ for @-@ one in miniature . They also designed the Danish Maritime Museum in Elsinore , Denmark , and a master plan for the new Smithsonian Institution south campus in Washington , D.C. This is part of a 20 @-@ year project that will begin in 2016 .

Ingels also designed two extensions for his former High School in Hellerup , Denmark ? a handball court , and a larger arts and sports extension . The handball court , in homage to the architect 's former math teacher , sports a roof with curvature that traces the trajectory of a thrown handball .

In 2015 Ingels began working on a new headquarters for Google in Mountain View , California with Thomas Heatherwick , the British designer . Bloomberg Businessweek hailed the design as " The most ambitious project unveiled by Google this year ... " in a feature article on the design and its architects . Later that year , BIG was chosen to take up the design of Two World Trade Center , one of the towers replacing the Twin Towers . The work had initially been entrusted to the British firm Foster and Partners .

= = Other engagements = =

In 2009 , Ingels became a co @-@ founder of the KiBiSi design group , together with Jens Martin Skibsted and Lars Larsen . With interests in urban mobility , architectural illumination and personal electronics , KiBiSi designs bicycles , furniture , household objects and even aircraft , becoming one of Scandinavia 's most influential design groups . KiBiSi designed the furniture for Ingels ' Danish Pavilion at EXPO 2010 .

Ingels 's first book , Yes Is More : An Archicomic on Architectural Evolution , catalogued 30 projects from his practice . It was in the form of a comic book , as he believed that 's the best way to tell stories about architecture . A sequel , Hot to Cold : An Odyssey of Architectural Adaptation , explored 60 case studies through a climatic lens , to examine where and how people live on the planet , working from the warmest regions to the coldest . The book was designed by Grammy Award winning designer Stefan Sagmeister , and accompanied by an exhibition of the same name at the National Building Museum in Washington D.C. The book featured well known projects such as VIA (West 57th) , Amager Bakke , 8 House , Gammel Hellerup High School , Superkilen , The Lego House and the Danish Maritime Museum , amongst others .

In 2009 , Ingels spoke at a TED event in Oxford , UK . He presented the case study ? Hedonistic sustainability ? in a workshop on managing complexity at the 3rd International Holcim Forum 2010 in Mexico City , and was a member of the Holcim Awards regional jury for Europe in 2011 .

In 2015 , a division of the Kohler Company , Kallista , released a new line of bath and kitchen products designed by Ingels . Named " taper " , the fixtures featured minimalist and mid @-@ century Danish design .

= = = Film = = =

Ingels was cast in My Playground , a documentary film by Kaspar Astrup Schröder that explores parkour and freerunning , with much of the action taking place on and around BIG projects .

He was also part of the documentary film Genre de Vie , about bicycles , cities and personal awareness . It looks at desired space and our own impact to the process of it . The film documents urban life empowered by the simplicity of the bicycle .

= = Design philosophy = =

In 2009 , The Architectural Review said that Ingels and BIG " has abandoned 20th @-@ century Danish modernism to explore the more fertile world of bigness and baroque eccentricity ... BIG 's world is also an optimistic vision of the future where art , architecture , urbanism and nature magically find a new kind of balance . Yet while the rhetoric is loud , the underlying messages are serious ones about global warming , community life , post @-@ petroleum @-@ age architecture

and the youth of the city . " The Netherlands Architecture Institute described him as " a member of a new generation of architects that combine shrewd analysis , playful experimentation , social responsibility and humour . "

In an interview in 2010 , Ingels provided a number of insights on his design philosophy . He defines architecture as " the art of translating all the immaterial structures of society ? social , cultural , economical and political ? into physical structures . " Architecture should " arise from the world " benefiting from the growing concern for our future triggered by discussion of climate change . In connection with his BIG practice , he explains : " Buildings should respond to the local environment and climate in a sort of conversation to make it habitable for human life " drawing , in particular , on the resources of the local climate which could provide " a way of massively enriching the vocabulary of architecture . "

Luke Butcher noted that Ingels taps into metamodern sensibility , adopting a metamodern attitude ; but he " seems to oscillate between modern positions and postmodern ones , a certain out @-@ of @-@ this @-@ worldness and a definite down @-@ to @-@ earthness , naivety and knowingness , idealism and the practical . " Sustainable development and renewable energy are important to Ingels , which he refers to as " hedonistic sustainability " . He has said that " It 's not about what we give up to be sustainable , it 's about what we get . And that is a very attractive and marketable concept . " He has also been outspoken against " suburban biopsy " in Holmen , Copenhagen , caused by wealthy older people (the grey @-@ gold generation) living in the suburbs and wanting to move into the town to visit the Royal Theatre and the opera .

In 2014 , Ingels released a video entitled ' Worldcraft ' as part of the Future of StoryTelling summit , which introduced his concept of creating architecture that focuses on turning " surreal dreams into inhabitable space " . Citing the power of alternate reality programs and video games , like Minecraft , Ingels ' ' worldcraft ' is an extension of ' hedonistic sustainability ' and further develops ideas established in his first book , Yes Is More . In the video (and essay by the same name in his second book , Hot to Cold : An Odyssey of Architectural Adaptation) Ingels notes : " These fictional worlds empower people with the tools to transform their own environments . This is what architecture ought to be ... " " Architecture must become Worldcraft , the craft of making our world , where our knowledge and technology doesn 't limit us but rather enables us to turn surreal dreams into inhabitable space . To turn fiction into fact . "

= = Notable projects = =

For a full list of projects , see Bjarke Ingels Group # Completed projects

Two World Trade Center New York City , office building (On hold , Larry Silverstein is in talks with News Corporation and 21st Century Fox to create a joint headquarters .)

= = = Exhibitions = = =

2007 BIG City , Storefront for Art and Architecture , New York

2009 Yes is More , Danish Architecture Centre , Copenhagen

2010 Yes is More , CAPC , Bordeaux and WECHSELRAUM , Stuttgart

2015 Hot to Cold : An Odyssey of Architectural Adaptation , National Building Museum

= = Awards = =

For a more detailed list of awards , see Bjarke Ingels Group # Awards