

3D printing pioneer Joris Laarman opens first major solo show at Groninger Museum

Nov 28, 2015 | By Kira

Certainly one of the most influential and prominent 3D printing designers, inventors, artists and pioneers, Joris Laarman has this week opened his first ever major solo show at the Groninger Museum in the Netherlands. The career-spanning exhibition includes his open-source, 3D printed puzzle chairs, the organically inspired 3D printed Bone Chair, and a new sinuous sculpture made specially for exhibition using the same MX3D metal 3D printer that is currently building the world's first 3D printed steel bridge in Amsterdam.

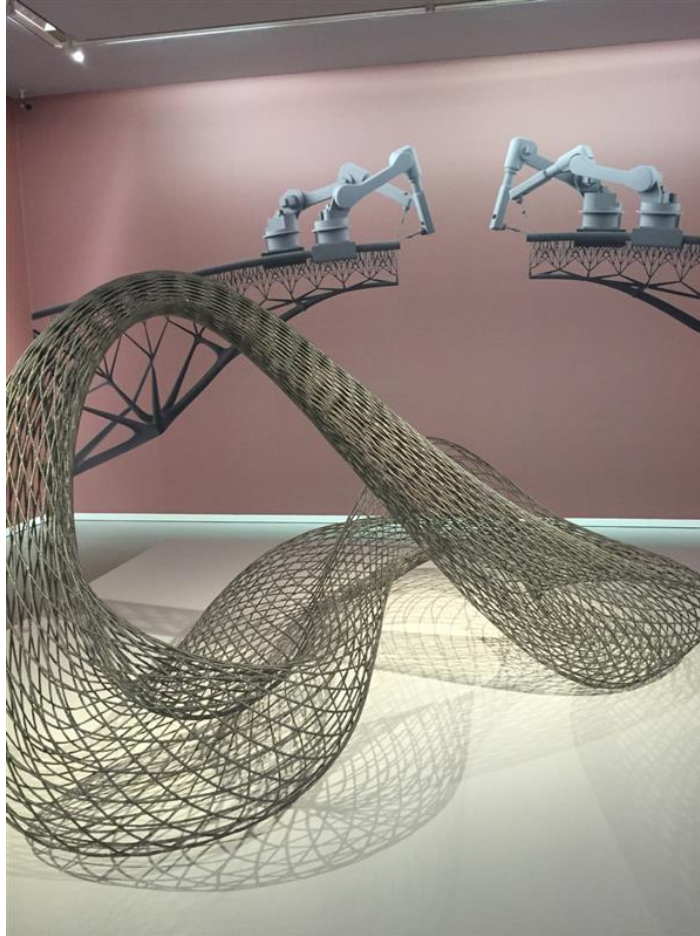
Founded in 2004, Joris Laarman Labs has been pioneering in cutting-edge experiments that combine art, science, and technology—particularly advanced manufacturing and 3D printing processes with using metals and innovative, large-scale machines. He is also known to work with craftsmen, scientists and engineers, and to experiment with algorithms, open-source design, and even genetically modified cells in certain works of art.



Kira. "3D Printing Pioneer Joris Laarman Opens First Major Solo Show at Groninger Museum," *3ders*, November 28, 2015.

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Pieces on display at the exhibition include the 'Maker Chairs', the world's first open-source, crowd-fabricated 3D printed chairs, created through his Bits & Parts project. Each chair generated out of a single shape divided into 202 3D jigsaw puzzle pieces, and expands the potential of small consumer 3D printers and CNC milling machines to fabricate full-size, affordable furniture.



Also in display is the Bone Chair, based on computer algorithms that replicate bone growth. Equally stunning is the White Armchair, which Laarman cast in a single piece in a 3D printed 91-part mold

Much of the work in Laarman's exhibition was created on his groundbreaking MX3D 3D printer, an industrial robot with a six-axis 3D printing technique and advanced welding tools that allow it to do away with the constraints of typical three-axis setups, 3D printing metals such as steel, titanium, aluminum, bronze, or copper in mid-air, without the need for support structures.

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One such piece on display is the 12 x 8 foot Dragon Bench, manufactured on the MX3D using small amounts of molten stainless steel. “By adding small amounts of molten metal at a time, we can print double curved lines in midair,” said the artist. “3D printing like this is still unexplored territory and leads to a new form language that is not bound by additive layers. The sculptural Dragon Bench explores this. Lines can be printed that intersect in order to create a self-supporting structure.”

The MX3D was also used to generate a brand new metal sculpture for the Groningen Museum, designed to showcase the unique manufacturing process, and it is of course part of the exciting 3D printed steel bridge that is creating a lot of buzz in Amsterdam.

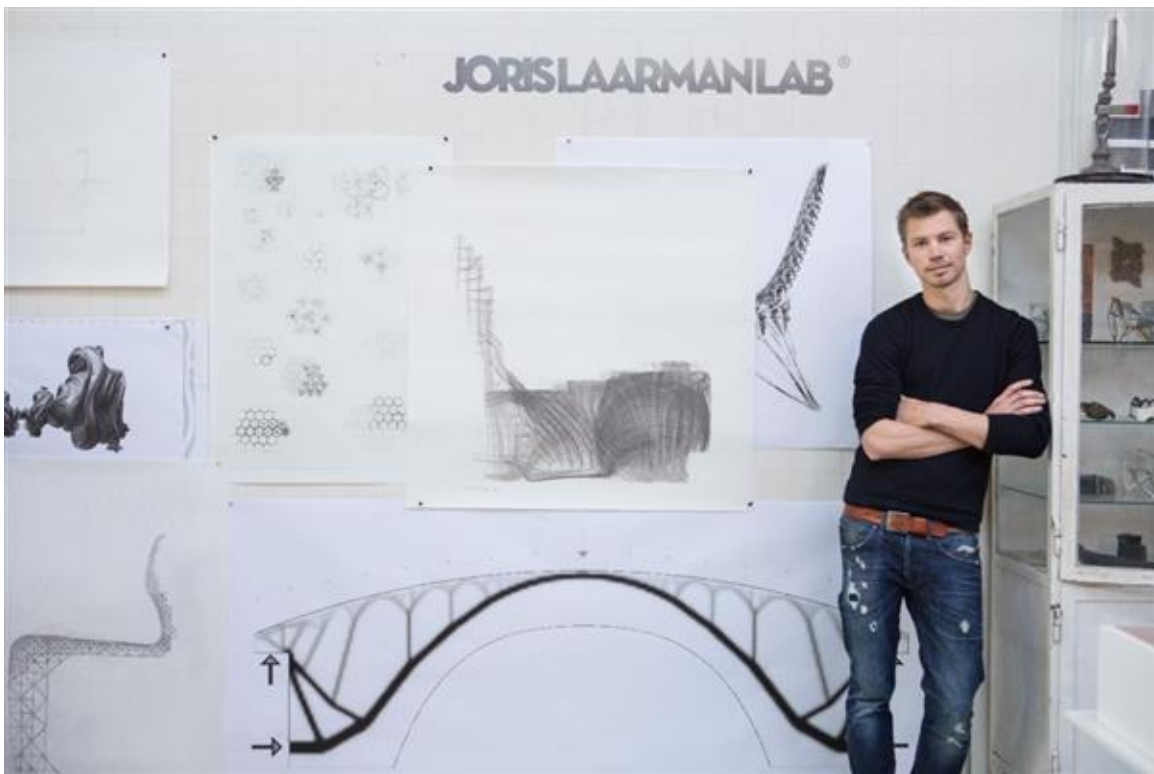
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Laarman grew up in the rural countryside of the Netherlands before attending the Design Academy Eindhoven in 1998, and graduating cum laude in 2003. His graduation project, the Reinventing Functionality Project, earned him early recognition, and since then his work has been added to the permanent collections of many renowned international museums, including the MoMA, V&A, Centre Pompidou and the Rijksmuseum Amsterdam. In 2011, he also received an innovator of the year award by the wall street journal.

The Groninger Museum itself has already acquired many of his works, including the Bone Chaise, Bookshelf and Digital Matter table series, however the current exhibition, which runs from November 22, 2015 until April 10, 2016, marks his first ever major solo exhibition and coincides with the first retrospective book about Joris Laarman Lab. After April, the exhibition will move to the Musée des Arts Décoratifs in Paris, the Cooper Hewitt Smithsonian Design Museum in New York, the High Museum of Art in Atlanta and the Museum of Fine Arts in Houston.

For fans of contemporary art, 3D printing, and the innovative space where those worlds meet, the Joris Laarman retrospective is a must-see, and will surely inspire the next generation of 3D printing artists, inventors and pioneers.



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