

**Vitra Design Museum**

Charles-Eames-Straße 2  
Weil am Rhein/Basel  
[www.design-museum.de](http://www.design-museum.de)

PRESS CONFERENCE

10.02.2017, 2 pm

OPENING

10.02.2017, 6 pm

Opening talk by Bruce Sterling

DOWNLOADS

[www.design-museum.de/press\\_images](http://www.design-museum.de/press_images)

**Hello, Robot.  
Design between Human and Machine  
11.02. – 14.05.2017**

**Whether in the form of delivery drones, smart sensors, or Industry 4.0 — in recent years, robotics has found its way into our everyday lives, changing them in fundamental ways. Design has a central role to play in this process, for it is designers who shape the interfaces between humans and machines. From 11 February to 14 May 2017, the Vitra Design Museum will present a major exhibition that examines the current boom in robotics in detail for the first time. »Hello, Robot. Design between Human and Machine« will comprise more than 200 exhibits from the fields of design and art and will include robots used in the home, in nursing care, and in industry as well as computer games, media installations, and examples of films and literature in which robots feature. It will show the wide variety of forms that robotics takes today and at the same time broaden our awareness of the associated ethical, social, and political issues.**

During the last decade, digitalisation has caused a radical redefinition of robotics. Nowadays, robots do not just build cars and washing machines or transport us in self-propelled trains from one airport terminal to another, but appear in a host of other forms, ranging from communicative domestic appliances, the so-called Internet of Things, to the self-learning algorithms in computer programmes, known as bots. Whereas robotics used to be the exclusive domain of engineers and IT experts, today designers are helping to shape the current boom in robotics in key ways, for it is often they who decide how and where we encounter robots, what kind of relationship we form with them, and how we interact with them – or they with us.

»Hello, Robot.« introduces us to robots in four steps. The first section of the exhibition traces the fascination that artificial humans have long exerted on people in the modern age and looks at how popular culture has shaped our perception of robots. The second section is devoted to the field in which robotics first made a breakthrough: industry and the world of work. Whereas robots are typically perceived in this context as a threat to jobs, »Hello, Robot.« looks at the current debate on this subject from a number of very different perspectives. The spectrum of exhibits ranges here from classic industrial robots to an installation by the group RobotLab, in which a robot produces manifestos on a production line, thus questioning where the boundary lies between work that can be automated and human creativity. The third section of the exhibition shows how we are gradually coming face to face with the new technology – as a friend and helper in our everyday lives, in our households, in nursing care, as a digital companion, or even in cybersex. The fourth section looks at the increasing blurring of the boundaries between humans and robots – exemplified by our living in »learning« buildings, travelling through »smart cities«, or having smart sensors implanted in our bodies.

Outside the museum, the »Elytra Filament Pavilion« complements the exhibition. This bionic baldachin is an impressive example of the growing influence of robotics on architecture. The individual modules were defined by an algorithm and then produced with the help of an industrial robot. The pavilion was realised by a team from the University of Stuttgart that included Achim Menges and has already been shown at the Victoria & Albert Museum in London.

»Hello, Robot.« shows the ambivalence with which the spread of robotics has been viewed for many decades. Right from the start, the debate about artificial intelligence has oscillated between utopian and dystopian visions, between the hope of a better, technologically advanced world and the fear of disempowerment. In this context, we are once again confronted with the question of the designer's responsibility.

The controversy about the right approach to robotics is reflected in fourteen questions that guide the viewer through the exhibition as a kind of leitmotif. They invite visitors to reflect on their own attitudes to new technology and show how closely linked the opportunities and risks attendant on robotics often are. For while robotics has become more approachable, more personal, more essential even, the question remains: Does it make our world any better?

An extensive programme of talks, films, performances, and workshops will accompany the exhibition and illuminate the theme of robotics from a number of different perspectives. The layout of the exhibition catalogue was programmed by an algorithm in cooperation with Double Standards, Berlin. Key visual: Christoph Niemann.

### **#hellorobot**

The museum invites all visitors to share their impressions and photos of the exhibition on Twitter, Facebook, and Instagram under the hashtags #hellorobot and #vitradesignmuseum.

### **The 14 questions of the exhibition**

1. Have you ever met a Robot?
2. What was your first experience with a Robot?
3. Do we really need Robots?
4. Are Robots our friends or our enemies?
5. Do you trust Robots?
6. Could a Robot do your job?
7. Do you want to become a producer yourself?
8. How much do you want to rely on smart helpers?
9. How do you feel about objects having feelings?
10. Do you believe in the death and rebirth of things?
11. Do you want a Robot to take care of you?
12. Do you want to become better than nature intended?
13. Are Robots advancing evolution?
14. Would you live in a Robot?

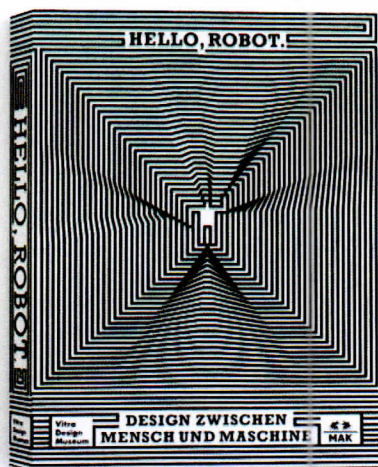
### **International cooperation partners**

The exhibition is a cooperation between the Vitra Design Museum, MAK – Österreichisches Museum für angewandte Kunst/Gegenwartskunst, Wien, Vienna, and Design museum Gent. The curators of the exhibition are Amelie Klein (Vitra Design Museum), Thomas Geisler and Marlies Wirth (MAK Vienna), and Fredo de Smet (Design museum Gent, advising curator). The team of consultants includes international experts on the subject of robots such as Bruce Sterling, the science-fiction author and network activist; Gesche Joost, head of the Design Research Lab at the University of the Arts Berlin and a member of several bodies advising the German federal government on Industry 4.0; Carlo Ratti, architect and head of the MIT Senseable City Lab in Cambridge, USA; Sabine Himmelsbach, media art historian and director of the Haus der elektronischen Künste Basel; and Paul Feigelfeld, cultural and media researcher and coordinator of the Digital Cultures Research Lab at the Leuphana University of Lüneburg.

### **Participating artists (selection)**

Woody Allen, Archigram, Asmbld, automato.farm, Hanna Barbera, Philip Beesley, Wafaa Bilal, Francis Bitonti, Björk, Julius Breitenstein, Bureau d'études, Sander Burger, Edward Burtynsky, Dan Chen, Jan De Coster, Douglas Coupland, Daft Punk, Disney/Pixar Animation Studios, Dunne & Raby, ECAL, Tal Erez, Flower Robotics, Vincent Fournier, Yves Gellie, Gramazio & Kohler Research/ETH Zurich, Kevin Grennan, Susanna Hertrich, Höweler + Yoon Architecture, Zan-Lun Huang, Ted Hunt/Luke Sturgeon/Hiroki Yokoyama, IAAC/Vicente Guallart, ICD University of Stuttgart, Interactive Architecture Lab/UCL the Bartlett, Alfredo Jaar, Spike Jonze, Joris Laarman Lab, Floris Kaayk, Friedrich Kiesler, Elizabeth King/Richard Kizu-Blair, Dirk Vander Kooij, Kraftwerk, KRAM/WEISSHAAR, Stanley Kubrick, George Lucas, Greg Lynn, Keiichi Matsuda, MIT Senseable City Lab, Shawn Maximo, Moth Collective, NASA, Next Nature Network, Christoph Niemann, Tatsuya Matsui, Ruben Pater/Gonçalo F Cardoso, Johanna Pichlbauer/Mia Meusburger, Eric Pickersgill, Joseph Popper, Gerard Ralló, Carlo Ratti Associati, RC4/UCL the Bartlett/CurVoxels, Alexander Reben, robotlab, Rafaël Rozendaal, Philipp Schmitt/Stephan Bogner/Jonas Voigt, Takanori Shibata, Masamune Shirow, Hajime Sorayama, Ismael Soto, Bruce Sterling/Sheldon Brown, Superflux, Jacques Tati, Kibwe Tavares, Osamu Tezuka, Anouk Wipprecht, and many others.

## Exhibition Catalogue



### **Hello, Robot. Design between Human and Machine**

Editors: Mateo Kries, Christoph Thun-Hohenstein, Amelie Klein

Softcover

25x19 cm, 328 pages

Approx. 250 mainly colour illustrations

ISBN: 978-3-945852-10-8

German retail price: 49,90€

The book »Hello, Robot. Design between Human and Machine« published in conjunction with the exhibition shows us all the places where we are already encountering intelligent machines: in industry, the military, and in our everyday environment; in children's rooms and retirement homes; in our bodies and in the Cloud; in shopping and sex; in computer games; and, last but not least, in films and literature.

In essays and interviews, experts examine in more detail how we are dealing with the fact that our environment is becoming ever more digital, ever smarter, and ever more autonomous. They highlight our – often ambivalent – attitude to new technologies and discuss the ethical and political questions that robotics raises for us as individuals and for society as a whole.

Contributors: Rosi Braidotti, Douglas Coupland, Anthony Dunne & Fiona Raby (Dunne & Raby), Christoph Engemann, Paul Feigelfeld, Gesche Joost, Amelie Klein, Carlo Ratti, RobotLab, Bruce Sterling and many more.

The layout of the book was designed by an algorithm in cooperation with Double Standards, Berlin.  
Cover illustration: Christoph Niemann.

## **TALKS / DISCUSSIONS / PERFORMANCES**

### **Bruce Sterling – Life with Robots**

OPENING TALK (EN) | 10 February 2017

6 pm, Fire Station

The novels and stories of the science fiction author Bruce Sterling were highly influential in defining the cyberpunk genre. For the opening of »Hello, Robot«, he discusses how robots are already part of our lives today and how they already impact the design of our environment.

registration: [events@design-museum.de](mailto:events@design-museum.de)

### **Dunne & Raby – Critical Design and Robotics**

TALK (EN) | 16 February 2017

6:30 pm, Vitra Design Museum

The British designers and design scientists Anthony Dunne and Fiona Raby are pioneers of a critical approach to design. Fiona Raby talks about her work at the intersection of social and natural sciences, and at the interface of design and new technologies.

### **Curator's Tour »Hello, Robot.«**

WEDNESDAY MATINEE (DE) | 29 March 2017

10 am, Vitra Design Museum, € 10.00 per person

What is the current status of the relationship between humans and robots? Curator Amelie Klein gives a guided tour of the exhibition.

### **Carlo Ratti – Senseable Cities**

TALK (EN) | 20 April 2017

6:30 pm, Vitra Design Museum

Architect and engineer Carlo Ratti directs the Senseable City Laboratory at the renowned Massachusetts Institute of Technology (MIT) in Cambridge, Massachusetts. In his lecture, Ratti will present his work at the Senseable City Lab and offer fascinating insights into the future of the digital city.

### **Robo Wunderkind**

SPECIAL (DE/EN) | 22/23 April 2017

12 – 4 pm, Vitra Design Museum

The Austrian company Robo Technologies has been awarded numerous prizes for its Robo Wunderkind toy, from as early as the initial crowdfunding phase. The Vitra Design Museum is offering children and adults the opportunity to explore the manifold possibilities offered by Robo Wunderkind over an entire weekend.

### **The Future of Work**

TALK (DE) | 27 April 2017

6:30 pm, Vitra Design Museum

What will the world of work look like in the future, and what role will robots play in it? These questions and others will be discussed by three experts on the topic of Industry 4.0: Gesche Joost, Head of the Design Research Lab at Berlin University of the Arts and digital issues representative of the Federal

German Government to the EU Commission, technology philosopher Bruno Gransche from the Fraunhofer Institute for Systems and Innovation Research ISI in Karlsruhe, as well as Ruwen Kaminski, Head of Corporate Brand and Design at leading automation company Festo.

**Achim Menges – »Hello, Robot« – »Hello, Architect!«  
Conceptual Design in the Age of Robotic Architecture**

TALK (DE) | 4 May 2017

6:30 pm, Vitra Design Museum

The architect Achim Menges, founder and head of the »Institute for Computational Design« at the University of Stuttgart, is regarded as a pioneer in the area of robot-assisted architecture. In his lecture, Menges will talk about his buildings and about the general role of robotics in architecture.

**Robopop**

SPECIAL (DE/EN) | 5 May 2017

6:30 pm, HeK (Haus der elektronischen Künste) Basel

Behind the decks, in casting shows or as entire robo-bands: Three acts performed by and with robots at the Haus der elektronischen Künste Basel are sure to provide exciting entertainment.

**WORKSHOPS**

**Hello, Robot!**

CHILDREN'S TOUR (DE) | 19 February, 19 March, 16 April, 14 May 2017

2:30 pm, Vitra Design Museum

During this tour, participants explore the exhibition and discover a fascinating variety of robots and machines. At the end, each child has the opportunity to build their own self-propelling robot. For children from 6 to 12 years, € 7.00 per child, registration: [info@design-museum.de](mailto:info@design-museum.de)

**Solar Sound Bot – Tweet, Tweet!**

WORKSHOP (DE) | 25 February 2017

12 – 4 pm, Vitra Design Museum

Have you always wanted to build your own robot? In this workshop, participants will build a simple sound machine that imitates birdcalls. Following a tour of the exhibition »Hello, Robot.«, these little tweeting machines will be soldered together and operated with solar cells. This workshop is a cooperation with HeK (Haus der elektronischen Künste) Basel.

For young people aged 12 and over, € 10.00 per person, registration: [info@design-museum.de](mailto:info@design-museum.de)

**Robodance**

WORKSHOP (DE) | 2 April 2017

2 – 5 pm, HeK (Haus der elektronischen Künste) Basel

We normally have no difficulty keeping our balance, and hardly give it a thought. But how can we teach that to a machine? In this workshop, we will build a simple robot that can balance on two wheels and perform a little dance. This event is organised in cooperation with the SGMK (Swiss Mechatronic Art Society). For children aged 7 and older (with an accompanying adult), youth and adults.

CHF 30.00 / 15.00 (reduced) per person (excl. cost of materials), registration: [vermittlung@hek.ch](mailto:vermittlung@hek.ch)

**DIY Robots**

WORKSHOP (DE/EN) | 6 May 2017

10 am – 6 pm, Schaudepot

At a young age, designer Jan de Coster was fascinated by physics, science fiction and the concept of »hacking« things. Besides working in his own studio named Slightly Overdone, he teaches robot design to both older and younger generations about many aspects of robot design, from electronic and mechanical features to the appearance and character of a robot. For participants aged 13 to 18, € 20.00 per person (incl. cost of materials), registration: [info@design-museum.de](mailto:info@design-museum.de).

## Facts

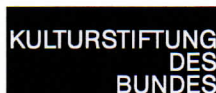
Title:	Hello, Robot. Design between Human and Machine	
Curators:	Vitra Design Museum	Amelie Klein, curator Erika Pinner, curatorial assistant
	MAK Wien	Thomas Geisler, Marlies Wirth
	Design museum Gent	Fredo de Smet (counselling)
Place:	Vitra Design Museum Charles-Eames-Straße 2 79576 Weil am Rhein	
Duration:	11 February 2017 – 14 May 2017	
Opening:	10 February 2017, 6pm Fire station	
Opening hours:	daily, 10am – 6pm	
Further information:	<a href="http://www.design-museum.de">www.design-museum.de</a> T +49.7621.702.3200 E <a href="mailto:info@design-museum.de">info@design-museum.de</a>	
Social media hashtags:	#hellorobot #vitradesignmuseum	
Press contact:	BUREAU N Silke Neumann & Stefanie Lockwood T +49.30.62736.104, E <a href="mailto:silke.neumann@bureau-n.de">silke.neumann@bureau-n.de</a> ; <a href="mailto:stefanie.lockwood@bureau-n.de">stefanie.lockwood@bureau-n.de</a>	
	Vitra Design Museum Iris Mickein, Head of Communications T +49.7621.702.3153 E <a href="mailto:communications@design-museum.de">communications@design-museum.de</a>	

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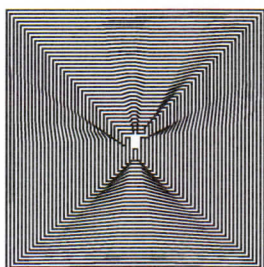


**Press Images**

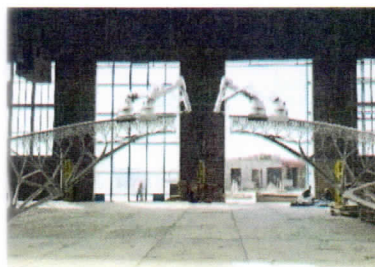
**Hello, Robot. Design between Human and Machine**

**11.02. – 14.05.2017**

Vitra Design Museum, Weil am Rhein



**01**  
Christoph Niemann, »Robot Morph«,  
2016 © Christoph Niemann



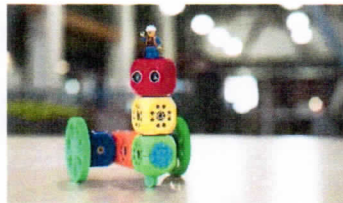
**02**  
Joris Laarman for MX3D, »Bridge Project«,  
2015  
3D-printed pedestrian bridge  
© Joris Laarman Lab



**03**  
ICD/ITKE Universität Stuttgart »Elytra Filament  
Pavilion«, Installation view Victoria & Albert Mu-  
seum, London, 2016  
© NAARO



**04**  
Stephan Bogner, Philipp Schmitt and  
Jonas Voigt, »Raising Robotic Natives«,  
2016  
© Jonas Voigt



**05**  
Robo Technologies, »Robo Wunderkind«,  
2015  
© Robo Technologies GmbH



**06**  
Sander Burger, »Alice Cares«, 2015  
Film still, © KeyDocs/Alice Cares



**07**  
Vincent Fournier, »Reem B #7 [Pal],  
Barcelona, Spain«, from: »The Man  
Machines«, 2010  
© Vincent Fournier



**08**  
Vincent Fournier, »Reem B #5 [Pal], Barce-  
lona, Spain«, from: »The Man Machines«, 2010  
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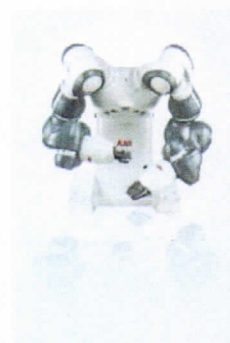
**09**  
TRNDlabs, »SKEYE Nano 2 FPV Drone«, 2015  
Remote control and nano drone  
© TRNDlabs



**10**  
Dunne & Raby, »Robot 4: Needy One«,  
from: »Technological Dream Series:  
No. 1, Robots«, 2007  
© 2016 Dunne & Raby, photo: Per Tin-  
gleff



**11**  
Anouk Wipprecht, »Spider Dress 2.0«, 2015  
3D-printed with Intel Edison Microcontrollers  
© Anouk Wipprecht, photo: Jason Perry



**12**  
ABB Ltd., »YuMi®, dual-arm industrial robot«,  
2015  
© ABB Ltd.



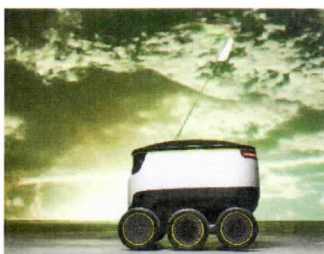
**13**  
Jan De Coster, »Robin«, 2015  
© Jan De Coster



**14**  
Yves Gellie, »Human Version 2.07 Nexis«,  
2009  
© Yves Gellie, Galerie du jour agnès b,  
Galerie Baudoin Lebon



**15**  
robotlab (ZKM), »manifest«, 2008  
© robotlab



**16**  
Starship Technologies, »Starship Delivery Robot«, 2015  
© Starship Technologies



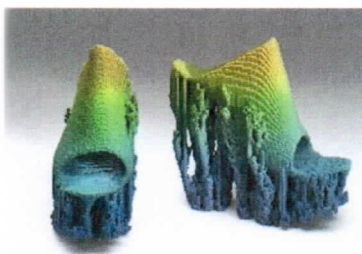
**17**  
Festo, »BionicANTs«, 2015  
© 2017 Festo AG & Co. KG



**18**  
Joseph Popper, »When the Home Stops«, 2011  
© Joseph Popper



**19**  
Historische Spielzeugroboter, 1956 –  
1980, private collection  
photo: Andreas Sütterlin



**20**  
Francis Bitonti Studio Inc., »Molecule Shoe«,  
2015  
3D-printed, © Francis Bitonti  
photo: Museum of Fine Arts, Boston



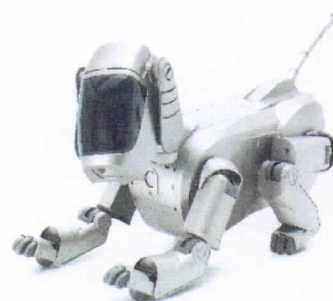
**21**  
Ted Hunt, Luke Sturgeon, Hiroki Yokoyama, »Syn-  
thetic Temperaments of Drones«, 2014  
© Ted Hunt, Luke Sturgeon, Hiroki Yokoyama. Pro-  
ject with the MA Design Interactions, Royal Col-  
lege of Art, London, under the direction of An-  
thony Dunne.



**22**  
Gina Leon and Zos Lee for AKA, »Mu-  
sio K«  
© AKA, LLC



**23**  
Yonezawa, »Directional Robot«, 1957  
private collection  
photo: Andreas Sütterlin



**24**  
Hajime Sorayama, Sony Corporation, »AIBO En-  
tertainment Robot (ERS-110)«, 1999  
private collection  
photo: Andreas Sütterlin



**25**  
iRobot, »Roomba« 980, 2016  
© iRobot Corporation



**26**  
Takanori Shibata, »Paro«, 2001  
© AIST Japan



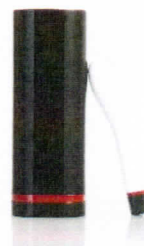
**27**  
Tatsuya Matsui, »Patin«, 2014  
home robot  
© Flower Robotics, Inc.



**28**  
Superflux, »Uninvited Guests, Pill Holder«  
2015, © Superflux



**29**  
»Amazon Echo«, 2016  
© Amazon



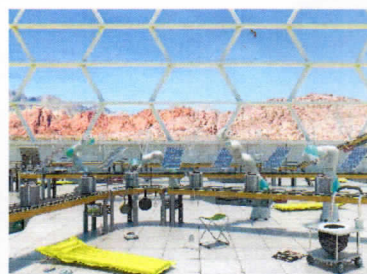
**30**  
Kiirroo, »Teledildonics for Long-Distance Relationships«, 2015  
© Kiirroo B.V.



**31**  
Carlo Ratti Associati, Vitra »Lift-Bit«, 2016  
© Carlo Ratti Associati, Foto: Max Tomasinelli



**32**  
Höweler + Yoon Architecture and Squared Design Lab, »EcoPods«, 2009  
architectural mockup  
© Höweler + Yoon Architecture and Squared Design Lab



**33**  
Shawn Maximo, »Going Green«, Vinylprint, 2016  
© Shawn Maximo



**34**  
Robo Technologies, »Robo Wunderkind«, 2015  
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