



MEDIA RELEASE  
SEPTEMBER 29, 2020

THE ARCHITECTURE MACHINE  
THE ROLE OF COMPUTERS IN ARCHITECTURE

MEDIA CONFERENCE: October 13, 2020, 11.00 A.M.

Ernst-von-Siemens-Auditorium, Pinakothek der Moderne

\*Media tour through the exhibition for reporting media only after accreditation at [presse@pinakothek-der-moderne.de](mailto:presse@pinakothek-der-moderne.de)

There will be a live stream of the press conference on Zoom at the same time:

<https://tum-conf.zoom.us/meeting/register/tJ0rduuqrD8qH9I5n4QsZjLwdrkZtFw8S0cj>

Password: Pixel

Meeting-ID: 996 1222 4056

Please make sure you are registered prior to the event.

OPENING: October 13, 2020, 2 p.m.-6 p.m., slow opening

DURATION: October 14, 2020 – January 10, 2021

For the first time in the German speaking countries, the Architekturmuseum der TUM presents a large-scale exhibition on the computer's influence on architecture. Beginning in the 1960s and ending in the present, the show recounts this fascinating history in four chapters, which sum up key developments of the so-called digital revolution: The computer as a drawing machine, the computer as a design tool, the computer as a medium for storytelling, and the computer as an interactive platform. The fundamental question that guided the two-year research project on which this show is based is simple: has the computer changed architecture, and if so, how?

The exhibition is curated by Teresa Fankhänel and contains more than forty international case studies and projects by architects, artists, engineers and researchers, many of which are collected in such an overview for the first time. Next to well-known pioneers such as Greg Lynn FORM (USA), John and Julia Frazer (UK), Reiser + Umemoto (USA), Itsuko Hasegawa (JPN) or Asymptote Architecture (USA), the show includes several new archival finds, among them the first building in Germany designed with the help of a computer, the Siemens Pavilion in Hanover by Ludwig Rase and Georg Nees (GER, 1970), and the entry to the Federal Government Buildings Competition in Bonn by Oswald Mathias Ungers and Werner Goehner (GER/USA, 1971-1972). Another newly unearthed exhibit is the first large-scale rendered fly-through of an urban space, Donald Greenberg's animation *Cornell in Perspective* (USA, 1969-1972), which was digitized specially for the show from the original 16 mm film. The exhibition also assembles several entries to one of the first architectural competitions, which required an animation as part of the design brief, for the unbuilt the Eyebeam Center (2001).



In addition to historical material the presentation collects recent projects by offices such as SHoP Architects (USA) and Atelier Oslo (NOR) as well as renderings by young practitioners such as Jana Čulek (NLD), Lucia Frascerra (UK), Dyvik Kahlen (UK), Brick Visual (HUN), Mir (NOR) and Dennis Allain (USA). As part of the chapter on interaction, the show presents a newly updated version of You+Pea's computer game London Developers Toolkit (UK, 2020) that lets users create their own satirical skyscrapers, and revisits Keiichi Matsuda's viral video work Hyper-Reality (UK, 2016).

In addition to individual projects the show presents, for the first time, a newly researched software timeline, which details the development of all major architectural programs which architects are using today as well as an overview of historical input devices for drawing on the computer. Finally, we are showcasing a reconstruction of the first drawing software Sketchpad by Ivan Sutherland (USA, 1963), recreated by Daniel Cardoso Llach (USA, 2017).

This exhibition is based on a two-year research project, which was supported by the Gerda Henkel Stiftung. In preparation of the book and exhibition an international conference was held at the Technical University in Munich on October 11, 2019, which included contributions by scholars and practitioners from the United States, Canada, China, the UK and Germany.

The exhibition is designed by Florian Bengert / BNGRT, Munich. Graphic design is by Parat.cc, Munich.

An accompanying catalogue is already available in bookstores (248 pages, 227 images, 39.95 Euros, separate German and English edition, Birkhäuser Verlag). The book contains eight essays by international scholars: Anna-Maria Meister, Georg Vrachliotis, Molly Wright Steenson, Mollie Claypool, Roberto Bottazzi, Teresa Fankhänel, Felix Torkar and Theodora Vardouli. It includes new research by another twenty-four researchers, architects and curators detailing the case studies that are included in the exhibition. The book also presents an overview of the history of architectural software.

The exhibition and book are supported by the following sponsors: PIN Freunde der Pinakothek, Wüstenrot Stiftung, Gerda Henkel Stiftung, Förderverein Architekturmuseum der TUM, Nemetschek Group, Baywobau, Wilkes Bavaria, Protektor, TUM, and BMW.

The Leibniz Rechenzentrum supports a new VR-installation by Atelier Oslo.

#### CATALOGUE

248 pages, 227 images, 39.95 Euros, ISBN 978-3-0356-2155-6, separate German and English edition, Birkhäuser Verlag (already available)

Curator | Teresa Fankhänel, Architekturmuseum der TUM



#### Guided Tours

SAT, 10/24/2020: 4.30-5.30 p.m. | Teresa Fankhänel (guided tour with the curator)  
FRI, 10/30/2020: 4.00-5.00 p.m. | Philip Schneider (guided tour)  
SUN, 11/01/2020: 3.00-5.00 p.m. | Philip Schneider (guided tour)  
THURS, 11/12/2020: 6.30-7.30 p.m. | Teresa Fankhänel (guided tour with the curator)  
FRI, 11/27/2020: 4.00-5.00 p.m. | Philip Schneider (guided tour)  
THURS, 12/03/2020: 6.30-7.30 p.m. | Teresa Fankhänel (guided tour with the curator)  
SUN, 12/06/2020: 3.00-5.00 p.m. | Philip Schneider (guided tour)  
SAT, 12/19/2020: 4.30-5.30 p.m. | Teresa Fankhänel (guided tour with the curator)  
SAT, 01/09/2020: 4.30-5.30 p.m. | Teresa Fankhänel (guided tour with the curator)

#### Workshops for Kids and Teenagers

Binary logic - what is that? It's been in almost all technical devices around us for a long time, including the 'Architecture Machine'—the computer in the architecture office—as a drawing machine, as a design tool, as a medium of storytelling and as an interactive communication platform. We'll take a closer look at this in the exhibition. Then we will go to work ourselves in the workshop, and examine, design and build our own answers. With binary logic. And yet completely free ...

1001 building workshop with Enrica Ferrucci @ ichbaumit in the new pavilion outside the Pinakothek der Moderne

For kids ages 8 through 12

SUN, 11/08/2020: 2.00-5.00 p.m.

SUN, 12/06/2020: 2.00-5.00 p.m.

WED, 12/23/2020: 11.00-2.00 p.m. (first day of winter break)

For families (parent-child-teams / kids ages 6 through 12)

SUN 11/22/2020: 2.00-5.00 p.m.

SUN, 12/20/2020: 2.00-5.00 p.m.

Come in groups with your guardian and please bring your masks!

Admission is 8 Euros, including a ticket to the exhibition. The number participants is limited.

Please sign up under 089 / 238 05 198 or [programm@pinakothek.de](mailto:programm@pinakothek.de)

#### Accompanying Program Online

Wednesdays on Zoom, 6.00-7.00 p.m. (CET)

<https://tum-conf.zoom.us/j/99110943100>

Meeting-ID: 991 1094 3100

Password: Pixel



WED, 10/28/2020: 6.00-7.00 p.m. (CET) Sandra Youkhana, Luke Pearson (You+Pea, UK) and Clara Frey (A.M.) in conversation

WED, 11/4/2020: 6.00-7.00 p.m. (CET) Digitale Anfänge in der Computerkunst, Heike Werner, Galerie für Computerkunst und Neue Fotografie (München) and Teresa Fankhänel (A.M.) in conversation

WED, 11/25/2020: 6.00-7.00 p.m. (CET) An Experimental Archaeology of Computer-Aided Design. Reconstructing, Emulating, and Speculating with Design Technologies, Daniel Cardoso Llach (Carnegie Mellon University, USA) and Philip Schneider (A.M.) in conversation

WED, 12/09/2020: 6.00-7.00 p.m. (CET) Beyond Representation: The Architectural Model as Virtual Prototype, Christopher Sharples (SHoP Architects, USA) and Andres Lepik (A.M.) in conversation

Further dates will be announced shortly on our website [www.architekturmuseum.de](http://www.architekturmuseum.de).

We look forward to your reviews. Please register for accreditation at [presse@pinakothek-der-moderne.de](mailto:presse@pinakothek-der-moderne.de). Restricted capacity.

\*Strict health and safety rules apply when visiting the museum. The basic measures are: Masks must be worn by all media representatives, a minimum distance of at least 1.5 meters must be maintained and groups must be avoided. Despite the limitation on the number of visitors to the exhibition rooms of the Architekturmuseum at this time, we would like to offer you a media preview. Please observe the health and safety regulations.



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FURTHER INFORMATION

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