

# BG

Press kit  
Berlin, 26.4.19

Fazit (Frimmersdorf), realities:united, 2011/2019, digitale Montage basierend auf einer Fotografie von Arne Hückelheim (CC BY-SA 3.0)



# realities: united

**Fazit**

**27.4.–19.8.19**

**BERLINISCHE  
GALERIE  
MUSEUM OF  
MODERN ART**



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realities:united**

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## realities:united

### Fazit

**27.4.–19.8.19**

Press conference  
Fr 26.4.19, 11 am

Opening  
Fr 26.4.19, 7 pm

The exhibition “Fazit” is the prelude to an artistic project of the same name which has been initiated by realities:united, the studio founded by the artists and architects Jan and Tim Edler. As Germany phases out its nuclear and coal-fired power generation, the big thermal power stations so typical of centralised energy production will undergo an artistic refit and be integrated into a project that confronts industrial, cultural and social change. The idea is to modify live power stations during their final phase of operation so that, rather than just producing energy and pollutant emissions, they become attractive landmarks visible from afar, emitting huge rings of steam to symbolise and inspire the transformation.

In technical terms, the idea is founded on the physical effect discovered by Daniel Bernoulli that enables stable, long-lasting rings of steam to be created out of the chaotic plumes over the power station. Taking advantage of the regular maintenance required by these installations, realities:united will assemble a simple apparatus in the cooling towers. The plan is to install this work at most of the 44 eligible coal-fired and nuclear power stations scattered across the country.

The project accompanies the period of radical transformation that Germany is currently undergoing now that it has begun to phase out nuclear and coal-fired generation. Not only have major utilities announced a “significant reduction in headcount”, while politicians debate numerous measures for maintaining infrastructure in the regions and localities affected. Quite apart from the structural change to the economy, these power stations and the industries associated with them have played a big role in regional identities. As symbols of an era of economic prosperity and unwavering faith in progress, they have moulded the landscape and become little short of icons. Shutting them down creates a vacuum that needs to be understood and sooner or later filled. As a project designed to accompany the energy transition, “Fazit” (which means “conclusions” but also “outcome”) is intended as a framework and catalyst for society to confront urgent questions about the future. This exhibition is the prelude and it will be flanked by public debates with people representing politics, the arts and public life and with visitors to the show.



## realities:united

realities:united was founded by Jan and Tim Edler in the year 2000 as a studio for art and architecture. They made their name internationally with projects like BIX, a light and media façade for the Kunsthaus in Graz. Other building ventures have been implemented with Peter Cook and Colin Fournier in Graz, EM2N in Zurich, Moon Hoon in Singapore and Will Alsop in Toronto. The two brothers also set up Flussbad Berlin, an urban development project supported by the federal and state governments to open up the Spree Canal in the centre of Berlin for public use.

## Exhibition catalogue

Distanz Verlag, 96 pages, Ger/Eng

museum edition: € 19.80

ISBN: 978-3-940208-59-0

book trade edition: € 24.90

ISBN: 978-3-95476-280-4

## Programme (in German):

### Talk and catalogue launch

8.5.19, 7 pm, admission free, no registration

Jan and Tim Edler of realities:united will be talking to Thomas Köhler, Director of the Berlinische Galerie and exhibition curator, and introducing the exhibition catalogue

### Discussion: Where is Planet B?

15.5.19, 4 pm, included in museum admission, please register via [bildung@berlinischegalerie.de](mailto:bildung@berlinischegalerie.de)

Event organised by the Berlinische Galerie Jugendbeirat (a sideviews e.V. project) and realities:united

### Panel debate: Sustainability and energy transition as a cultural challenge

19.6.19, 7 pm, admission free, no registration

Speakers include Prof. Günther Bachmann (Generalsekretär Rat für Nachhaltige Entwicklung) and Olaf Zimmermann (Geschäftsführer Deutscher Kulturrat).

### Panel debate: (Structural) change strategies for arts and culture in regions facing energy transition and the phase-out of coal

14.8.19, 7 pm, admission free, no registration

Speakers include Ellen Blumenstein (curator, HafenCity Hamburg) and Christine Herntier (Mayor of Spremberg)

Both panel debates will be chaired by Andreas Ruby (Director, Swiss Architecture Museum).

## Press Berlinische Galerie

Ulrike Andres

Head of Communication & Education

Tel +49 30 78 902 829

[andres@berlinischegalerie.de](mailto:andres@berlinischegalerie.de)

Contact:

Ulrike Schuhose

Tel +49 30 78 902 833

[schuhose@berlinischegalerie.de](mailto:schuhose@berlinischegalerie.de)

Berlinische Galerie

Berlin's Museum of Modern Art,

Photography and Architecture

Alte Jakobstraße 124–128

10969 Berlin

Tel +49 30 78 902 600

[berlinischegalerie.de](http://berlinischegalerie.de)

Admission € 10, concessions € 7

Wed–Mon 10am–6pm

Closed on Tuesdays

### Accompanying events

[berlinischegalerie.de/en/calendar/](http://berlinischegalerie.de/en/calendar/)

### Press images

[berlinischegalerie.de/en/press/press-information/press-images-realitiesunited/](http://berlinischegalerie.de/en/press/press-information/press-images-realitiesunited/)

### Online tickets

[berlinischegalerie.de/service/online-tickets](http://berlinischegalerie.de/service/online-tickets)

### Social media

#realitiesunited #berlinischegalerie



# Biography

## Jan and Tim Edler

Brothers Tim Edler and Jan Edler have been working together on projects at the interface between art and architecture ever since 1997. It began in Berlin when they co-founded the art and technology group "Kunst und Technik" (1997–2000). In 2000 they opened their studio "realities:united", working with their team on artistic and hybrid installations, mostly for an urban or architectural context.

Apart from art installations and light & media installations, their best-known ventures include "Flussbad Berlin", an urban development project for the environmental regeneration and public use of the Spree Canal, an unutilised section of the River Spree in the city's historical centre. This project is now run by an association of the same name with funds from the federal government and the State of Berlin.

In late 2018 the Edlers completed their first permanent work in Berlin: Drehmoment [Torque], a kinetic installation for the built environment placed outside the Futurium.

Works by the brothers have been acquired by museums – including the Museum of Modern Art (MoMA) in New York – and by private art collections. Their public-space installations can be found in the United States, Canada, Singapore, South Korea, Switzerland, Spain and Germany (in Magdeburg and Berlin).

Projects by realities:united have been shown at many international exhibitions, e.g. at the Museum für Angewandte Kunst in Cologne, MoMA in New York, the Biennale in Venice, the Museum of Contemporary Art (MOCA) in Taipei, the Kunstmuseum in Stuttgart, Museum Abteiberg in Mönchengladbach, the art museum Kloster unser Lieben Frauen in Magdeburg, the Deichtorhallen in Hamburg and the Swiss Architecture Museum.

The brothers have won various prizes and awards, among them the Hans Schäfer Preis (2004), Kunstpreis Berlin (in the category Built Environment, 2009) and the LafargeHolcim Award for Sustainable Construction (2011 & 2012).

Jan Edler (\*1970 in Cologne) studied architecture at the Technische Hochschule in Aachen and Bartlett School of Architecture in London. From 2010 to 2017 he was on the advisory board of Transmediale, Berlin's festival of digital culture. In 2014 he held a residency at the Deutsche Akademie, Villa Massimo in Rome. Since 2012 he has served on the executive board of the non-profit association "Flussbad Berlin".

Tim Edler (\*1965 in Cologne) studied computer science and architecture at the Technische Universität in Berlin. From 2005 to 2008 he was a guest professor at the University of the Arts in Bremen.

## Prizes/Nominations:

Flussbad: Projekt Nachhaltigkeit 2017, Rat für Nachhaltigkeit, 2017

Prix Européen d'Architecture Philippe Rotthier (Appreciation), 2017

LafargeHolcim Award (Europa, Gold, 100.000,- US\$), 2011

Kunstpreis Berlin 2009, Akademie der Künste Berlin (Förderpreis Baukunst), 2009

Designpreis der Bundesrepublik Deutschland (Nomination, 2008)

Contract World Award, Kategorie "Education & Culture" (Shortlist), 2008

ADC - Art Directors Club Germany (Silberner Nagel), 2007

Index Design Award (Top Nominee), 2007

Newsweek, The Design Dozen, 2006

Designpreis der Bundesrepublik Deutschland (Nomination), 2006

T-Com Inspire Award (Hauptpreis, 50.000,- EUR), 2005

Index Design Award (Top Nominee), 2005

Hans Schaefers Preis, BDA - Bund Deutscher Architekten Berlin, 2004



# Exhibition

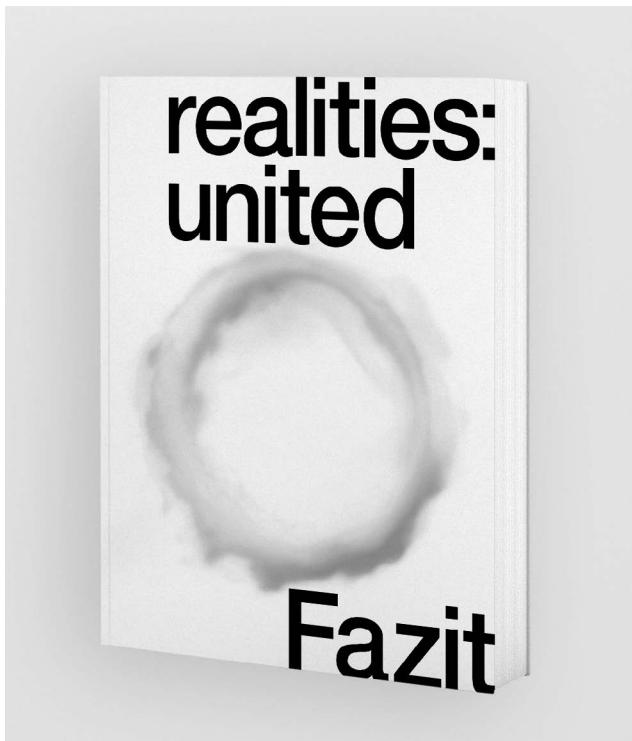
## text

realities:united are architects whose projects test the boundaries of art and architecture. The exhibition “Fazit” is the prelude to a broader venture of the same name. Now that Germany plans to phase out nuclear and coal-fired generation, the big thermal power stations that epitomise this centralised approach to production can be modified: While these installations are still live, realities:united intend to fit a device that will make rising steam form huge rings visible from afar – symbols of the transformation sweeping across the country.

Apart from triggering profound changes to the environment, the economy and social infrastructure, the energy transition is having a major impact on culture and everyday life. These power stations and the industries associated with them have played a big role in regional identities. As symbols of an era of economic prosperity and belief in progress, they have moulded the landscape and become little short of icons. Shutting them down creates a vacuum that needs to be understood and sooner or later filled. “Fazit” is intended as a framework and catalyst for society to confront urgent questions about the future.

The show is accompanied by panel debates where people representing politics, the arts and civil society will discuss the issues with visitors.

realities:united was founded by Jan and Tim Edler in 2000 as a studio for art and architecture. The two brothers also set up “Flussbad Berlin”, an urban development project to open up the Spree Canal in the centre of Berlin for community use.



## Exhibition catalogue

**realities:united  
Fazit**

Published on the occasion  
of the exhibition  
“realities:united. Fazit”  
at the Berlinische Galerie.

The “Fazit” catalogue features texts, charts and photographs about the eponymous art project by realities:united, which kicks off with the exhibition at the Berlinische Galerie. Essays by Thomas Köhler (director of the Berlinische Galerie and exhibition curator) and Antje Stahl (who won the Michael Althen Award for Critical Writing in 2018) offer insights into the activities of realities:united and describe the context for this venture. The book also presents a selection of past projects by realities:united, including Flussbad Berlin and BIG Vortex.

**Editors**

Berlinische Galerie

**Publisher**

Distanz Verlag

**Authors**

Dr. Thomas Köhler, Antje Stahl

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18,90 € (Museum Edition)

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## Press images

realities:united  
Fazit



Fazit (Neurath), © realities:united, 2019, digitale Montage basierend auf einer Fotografie von Frank Roeder/picture alliance/Westend61



Fazit (Frimmersdorf), realities:united, 2011/2019,  
digitale Montage basierend auf einer Fotografie von Arne Hückelheim (CC BY-SA 3.0)



© 2018 realities:united, Foto: Moritz Friese

## Texts by realities:united

### **Program**

In the years remaining before their decommissioning, the largest power plants in Germany, powered by nuclear or fossil fuels, will present a coordinated farewell performance. The end of a long and great epoch of the industrial age.

In addition to energy production, the slightly modified power plants will take on an additional task: the production of particularly beautiful high-flying clouds. Because an opportunity like this will not be presented again. Everywhere and in a coordinated rhythm. Visible from afar, from Lusatia to the Lower Rhine.

Locations and regions that have been shaped by their roles as energy producers outside urban areas will be visibly connected. They will draw attention to themselves as well as to the transformation process that needs to be managed on a societal and supra-regional level.

The conflict over coal and nuclear energy that has occupied society in recent decades will lose its paralyzing and divisive effect. The development task to be mastered by society and technology will once again be a joint project uniting society.

- realities:united

### **Explanatory texts from the exhibition:**

#### **Cooling tower models**

Models of power station cooling towers are put to the practical test in a wind tunnel during development or research projects. The windtunnel is used to simulate the aerodynamic properties of these structures, including the behaviour of steam inside and outside the cooling tower. Some structural simulations (wind stress) are also performed. The models on display are made of wood, aluminium and polyurethane.

#### **Thermal power station**

In a thermal power station, electricity is generated from the combustion of coal, natural gas, fuel oil or waste (primary energy sources). In a nuclear power station, heat is generated by splitting atoms in a reactor. In power stations of this type, water is turned to steam in order to drive turbines. The steam is then cooled by a condenser and returns to its liquid state as water. The condenser is operated by a separate cycle of cooling water, often by means of natural draught wet cooling.

The cooling effect is achieved by trickling water through the base of the cooling tower. A small percentage of the water evaporates via the surface of falling droplets and heat is released in the process. The water cooled in this way collects in the water tower and is pumped back into the cycle. As the tower is open at the bottom, creating a chimney effect, it continuously absorbs surrounding air. This transports the steam upwards, resulting in the characteristic plume over the cooling tower.



## Steam catapult

The “FAZIT” project entails carrying out technical modifications at the 34 eligible power stations in Germany. The plan is to install simple temporary apparatus to enable the steam rising up the cooling towers to accelerate briefly.

The sketches show a mechanism based on an open membrane anchored by elastic cables that springs vertically up the cooling tower within a limited zone, causing it to close and catapult the surrounding steam upwards.

## BIG Vortex Copenhagen

“BIG Vortex” was a proposal put forward by realities:united for an art installation included in the prize-winning design by Bjarke Ingels Architekten (BIG) for a new waste-to-energy plant in Copenhagen, Denmark (2011). In 2013 a decision was taken not to implement the art installation. The waste-to-energy plant Amagerforbrænding/Amager Bakke will be inaugurated in spring 2019.

“BIG Vortex” requires a technical modification to the flue gas unit at the power station. Instead of being continuously released through a chimney, the flue gases would initially collect in an extractable cylindrical container. Once the maximum level is reached, the container quickly contracts and the flue gas is catapulted into the sky, forming smoke rings with a diameter of about 30m and a CO<sub>2</sub> cargo of about 500 kg. The aim is to visualise the plant’s CO<sub>2</sub> emissions in a quantifiable way that people can immediately grasp. The energy, archaic form and fascinating beauty of the white gas rings combine with our knowledge about the problematic impacts of this type of power.

## Normative context

Two statutory instruments are particularly relevant to the shutdown of the big thermal power stations and the “FAZIT” project:

- 1) The Act on the Peaceful Utilisation of Atomic Energy and the Protection against its Hazards (1959/2017)

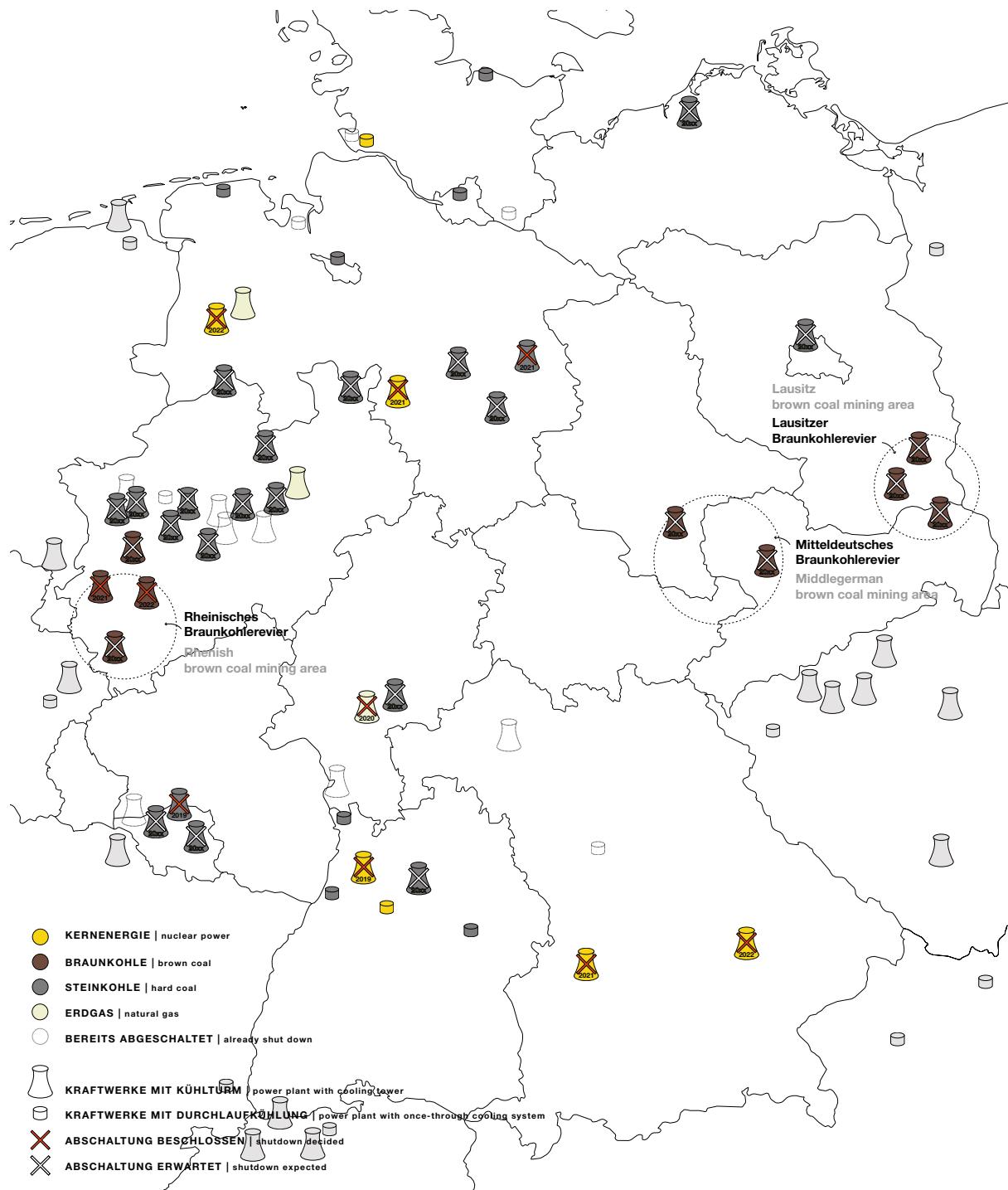
This “Atomic Energy Act” provides that the operation of nuclear power plants in Germany is to cease by the year 2022. The Act sets specific shut-down dates for each facility.

- 2) The Final Report of the Commission on Growth, Structural Change and Employment (“Coal Commission”) (2019)

The Commission recommends phasing out coal-to-power by 2038 at the latest. Specific shut-down dates for each facility and other key aspects of the implementing act still to be adopted are to be defined in the spring of 2019.

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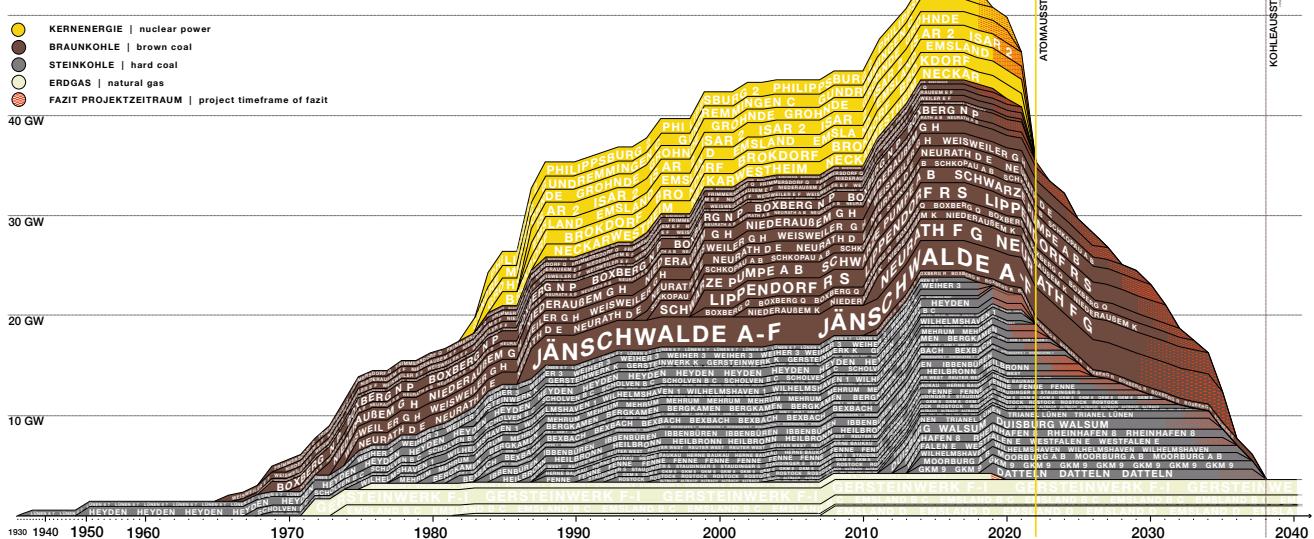
## Power Plants in Germany



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## Installed Power Station Capacity

INSTALLIERTE KRAFTWERKSLEISTUNG IN DEUTSCHLAND > 300 MW  
INSTALLED POWER STATION CAPACITY IN GERMANY > 300 MW





## **Contact** **Berlinische Galerie**

**Ulrike Andres**  
Head of Communication and Education  
Tel +49 030 78 902 829  
[andres@berlinischegalerie.de](mailto:andres@berlinischegalerie.de)

**Contact:**  
**Ulrike Schuhose**  
Communication and Education  
Tel +49 030 78 902 833  
[schuhose@berlinischegalerie.de](mailto:schuhose@berlinischegalerie.de)

## **Contact** **Education**

**Christine van Haaren**  
Head of Education and Outreach  
Tel +49 30 78 902 836  
[haaren@berlinischegalerie.de](mailto:haaren@berlinischegalerie.de)

**Katrin-Marie Kaptain**  
Education  
Tel +49 30 78 902 837  
[kaptain@berlinischegalerie.de](mailto:kaptain@berlinischegalerie.de)

**Berlinische Galerie**  
Berlin's Museum of Modern Art,  
Photography and Architecture  
Alte Jakobstraße 124–128  
10969 Berlin  
Tel +49 030 78 902 600  
[berlinischegalerie.de](http://berlinischegalerie.de)