

Fri 04.09.2015 – Sun 24.01.2016

Infosphere

ZKM_Atrium 1+2

Press conference: Thurs 03.09.2015, 11:00

The biosphere, of the atmosphere through to the oceans, forms the life zone of mankind and other living creatures. However, since the discovery of electromagnetic waves and the wireless radio technology based on these, about 150 years ago, we have also been living in an infosphere. The large-scale exhibition *Infosphere* depicts which answers are being found today by artists, designers, architects and scientists to these acute challenges of the infosphere: How do artists deal with big data, data sovereignty and the pollution of the infosphere? The exhibition makes the hidden sides of the infosphere and its physical presence in the world visible: Cable and hardware, data centres, espionage, exploration and weather satellites, server rooms of financial companies and banks, the infrastructure of the infosphere. The infosphere is not cyberspace. It actually surrounds us in a very real sense. About 80 international artists and artist groups are offering an overview of art in the era of the digital revolution and its social consequences.

Algorithms define our social order

The infosphere transforms the earth with technical media, such as radio, television, mobile communications and internet, which use electromagnetic waves, and guarantee a global flow of information in real-time. Without the digitally-controlled global movement of data, products and people, the existential demands of more than seven billion people could not be fulfilled. Since the alphabetical code was supplemented by the numerical code, algorithms have been a fundamental element of our social order. There is still no sufficient operating manual for dealing with them. This clearly manifests in subjects such as monitoring, big data and copyright on the internet. Against this background, contemporary art, which deals with and processes these themes, is particularly relevant.

Every second, billions of pieces of data circulate the globe

The American artist collective *The Office for Creative Research* investigates the infrastructure of air traffic from the motorway to security checks. They show how flows of people on roads and intersections are similar to digital data packages: They are bundled, sent, redirected and distributed. The analysis of movements of individual passengers and the involvement of a wide range of industries far into the periphery of the airport produce compelling data, which is visually comprehensible.

Press Release

August 2015

GLOBALE: Infosphere

Place

ZKM_Atrium 1+2

Period

Fri 04.09.2015 – Sun 24.01.2016

Press Conference

Thurs 03.09.2015, 11:00

Press Contact

Dominika Szope

Head of Press and

Publicity Office

Tel: +49 (0) 721 / 8100 – 1220

Regina Hock

Press and Publicity

Office Clerk

Tel: +49 (0) 721 / 8100 – 1821

Email: presse@zkm.de

www.zkm.de/presse

ZKM | Center for Art and

Media Karlsruhe

Lorenzstraße 19

76135 Karlsruhe

Supporter

swiss arts council

prohelvetia

GLOBALE is a project as part of the city's birthday – 300 Years Karlsruhe



Sponsored by



Founders of the ZKM



Baden-Württemberg
MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST

Partners of the ZKM



Media partner



Artists, such as *The Critical Engineering Working Group*, penetrate spheres which are actually concealed from the public: in the domains of unmanned aircraft and espionage, earth exploration and weather satellites. In a video essay by artist group *Semiconductor*, glimmering coloured images will show the radio waves which surround us everyday: As part of a research visit to the NASA Space Sciences Lab, they developed their own representations of scientific connections. In their internet project and non-linear essay film, *Stéphane Degoutin* and *Gwenola Wagon* give observers a view of the perspectives of data. You will experience how sharks bite through fibre-glass cables laid on the sea floor and see inside data centres.

Pollution of the infosphere

The risk of pollution is just as relevant to the infosphere as the atmosphere: The artist group *Unknown Fields* are exhibiting vases, which have been made from the sludge of a radioactively polluted lake in China. The lake is used as a collecting tank for the toxic waste products which arise during the production of smartphones, notebooks and car batteries. *Tyler Coburn* will also be focussing on the range of subjects concerning *Waste Management*.

New forms of knowledge accumulation

Through the rapid development of information technology, new forms of knowledge accumulation and distribution have developed. The infosphere is the basis and precondition of cognitive capitalism. In her video, *Emma Charles* reveals the internet infrastructure of the city of New York: The closer financial companies and banks are to server rooms in the heart of the financial district, the faster their algorithms reach their destination. The artist group *Bureau d'Études* maps power structures and ownership structures in politics, economy and society: They show the symbiosis of the modern man with the information technology that defines our biopolitical order. The artist *Zach Blas* rejects, based on Beatriz Preciado's *Manifiesto contrasexual*, the neoliberal logic of the internet and presents alternatives to the infrastructure of the internet. In her documentation video *Aleksandra Domanović* investigates the beginnings of the World Wide Web in Yugoslavia and the fragility of the network, which depends on the physical infrastructure and historical changes.

Sterling Crispin deals with the question of the data tracks we leave behind everyday. He reshapes the visual recognition of Facebook artistically and generates templates from the programme, which are only vaguely reminiscent of human faces. In this way, he investigates the boundaries which run between individuality and general recognisability. In a type of encyclopaedia, *Aram Bartholl* presents thousands of leaked passwords in alphabetical order: To protect private data, only the passwords are listed, not the user names. Visitors can look up their own passwords.

Press Release

August 2015

Globale: Infosphere

Place
ZKM_Atrium 1+2

Period
Fri 04.09.2015 – Sun 24.01.2016

Press Conference
Thurs 03.09.2015, 11:00

Press Contact

Dominika Szope
Head of Press and
Publicity Office
Tel: +49 (0) 721 / 8100 – 1220

Regina Hock
Press and Publicity
Office Clerk
Tel: +49 (0) 721 / 8100 – 1821

Email: presse@zkm.de
www.zkm.de/presse

ZKM | Center for Art and
Media Karlsruhe
Lorenzstraße 19
76135 Karlsruhe

Supporter

swiss arts council

prohelvetia

GLOBALE is a project as part of the city's birthday – 300 Years Karlsruhe



Sponsored by



Founders of the ZKM



Partners of the ZKM



Media partner



The globalised financial system is based on algorithms and computer programmes, which operate in secrecy: Mankind can no longer understand their codes. In their installations, the group **RYBN.ORG** highlights the arbitrariness of computer processes. Their collection provides an overview of attempts to predict the price movement on the markets using different scientific theories, from the theory of probability to quantum physics and algorithm engineering and pseudoscientific theories. **Stephanie Rothenberg** focusses on the cultural phenomenon of crowdfunding with an interactive, kinetic installation. **Oliver Laric** and **James Bridle** deal intensively with the specific culture of the infosphere and its *New Aesthetic*.

Clement Valla shows how Google changes our perception of the world and generates new world views with his postcards from Google Earth: They celebrate the aesthetics of glitch and error. Internet art pioneers **JODI** cultivate the dysfunctional version of Google software. **Mario Santamaria** shows photographs from the musealization of Google Art: The Google photo-robot, which turns 360° and photographs the museum's premises, can be seen in the mirror: It creates peculiar selfies of the machine.

Development of writing as a prerequisite of the infosphere

The discovery of electromagnetic waves by Heinrich Hertz and their exploitation are considered a condition for the development of the infosphere. If you go even further back into the development of cultural technology, the development of writing can also be termed a prerequisite of the infosphere: Storage and coding, among other things, became possible as a result. For this reason one section of the exhibition with artworks of **JIA**, **Natalie Bookchin** and **Adam Slowik** among others will be dedicated to writing. In the long-term project **REMOTEWORDS** by **Achime Mohné** and **Uta Kopp**, messages are attached to the rooftops of cultural institutions and the ZKM_Vorplatz. They form a semantic unit with the place that is housing them. To open the *Infosphere* exhibition, the message written by Peter Weibel will be spread – on five rooftops, of five cultural institutions, on five continents. To understand the message, virtual views of our planet using Google Earth or Bing Maps will provide the suitable tools.

Module of The Appearance of That Which Cannot Be Seen: Part of the *Infosphere* exhibition is **The Appearance of That Which Cannot Be Seen** by **Armin Linke**. With his photographs, Linke takes a look at central themes of GLOBALE, such as smart technology, big data and Industry 4.0. Scientists such as Ariella Azoulay, Bruno Latour or Jan Zalasiewicz have chosen different photos from Linke's extensive picture library which now contains more than 500,000 photographs and commented on these in texts and interviews.

Press Release

August 2015

GLOBALE: Infosphere

Place
ZKM_Atrium 1+2

Period
Fri 04.09.2015 – Sun 24.01.2016

Press Conference
Thurs 03.09.2015, 11:00

Press Contact

Dominika Szope
Head of Press and
Publicity Office
Tel: +49 (0) 721 / 8100 – 1220

Regina Hock
Press and Publicity
Office Clerk
Tel: +49 (0) 721 / 8100 – 1821

Email: presse@zkm.de
www.zkm.de/presse

ZKM | Center for Art and
Media Karlsruhe
Lorenzstraße 19
76135 Karlsruhe

Supporter

swiss arts council

prohelvetia

GLOBALE is a project as part of the city's birthday – 300 Years Karlsruhe



Sponsored by



Founders of the ZKM



Partners of the ZKM



Media partner



Module of Fabrizio Tamburini. Beyond Einstein's Dream. Riding the Photons: As part of the exhibition *Infosphere*, **Fabrizio Tamburini** is presenting in three installations his new model of light: light as a vortex, as a twisted electromagnetic wave. We obtain much of our knowledge of the universe through light. Electromagnetic waves become new tools to explore the universe and to interact with it. Human beings use the ethereal qualities of light as new and powerful tools. Distorted light and other conserved quantities of electromagnetic fields represent degrees of freedom that are to be used to interact with the world.

Involved artists: Timo Arnall & Jack Schulze & Einar Sneve Martinussen · Amy Balkin · Aram Bartholl · Wafaa Bilal · Zach Blas · Blast Theory · Bonjour, interactive lab (Jean-Philippe Jacquot, Gustave Bernier & Alexandre Rivaux) · Natalie Bookchin · Dineo Seshee Bopape · David Bowen · James Bridle · Bureau d'Études · Emma Charles · Tyler Coburn · Sterling Crispin · The Critical Engineering Working Group · Stéphane Degoutin and Gwenola Wagon · Dennis Del Favero with Elwira Titan, Peter Weibel and Som Guan, Volker Kuchelmeister, Robert Lawther, Alex Ong · Aleksandra Domanović · Thomas Feuerstein · Fraunhofer-Institut für Optronik, Systemtechnik und Bildauswertung IOSB · Laurent Grasso · Yoon Chung Han & Byeong-Jun Han · Jonathan Harris · Mishka Henner · Femke Herregraven · Brian House · Scottie Chih-Chieh Huang · Jennifer Lyn Morone™ Inc · Jia · JODI · Matt Kenyon (SWAMP) · Erik Kessels · Jeong Han Kim, Hyun Jean Lee, Jung-Do Kim · Brian Knappenberger · Oliver Laric · Marc Lee · George Legrady · Rafael Lozano-Hemmer · Mediengruppe Bitnik · Laurent Mignonneau & Christa Sommerer · Jonathan Minard & James George · Warren Neidich · The Office for Creative Research (Mark Hansen, Ben Rubin, Jer Thorp) · The Otolith Group · Julius Popp · Jon Rafman · REMOTEWORDED (Achim Mohné / Uta Kopp) · Stephanie Rothenberg · RYBN.ORG · Mario Santamaria · Philipp Schaerer · Semiconductor · Shinseungback & Kimyonghun · Adam Slowik · Smart Citizen Team in collaboration with IAAC | Fab Lab Barcelona, Media Interactive Design and Hangar · Karolina Sobocka, Christopher Baker · Werner Sobek, Stuttgart · Software Studies Initiative (Lev Manovich, Nadav Hochman, Jay Chow, Damon Crockett) · Superflux · Fabrizio Tamburini · Timo Toots · Suzanne Treister · Unknown Fields Division · Clement Valla · Alex Verhaest · Richard Vijgen · Christoph Wachter & Mathias Jud · Addie Wagenknecht · Gwenola Wagon · "Where dogs run" group · Krissy Wilson · Manfred Wolff-Plottegg · Matthias Wölfel / Angelo Stitz / Tim Schlippe · Erweiterte Sinnesorgane · Schnelle Übertragung von Schriften im 19. Jahrhundert – Die elektrische Telegraphie

Press Release

August 2015

GLOBALE: Infosphere

Place

ZKM_Atrium 1+2

Period

Fri 04.09.2015 – Sun 24.01.2016

Press Conference

Thurs 03.09.2015, 11:00
Press Contact

Dominika Szope

Head of Press and

Publicity Office

Tel: +49 (0) 721 / 8100 – 1220

Regina Hock

Press and Publicity

Office Clerk

Tel: +49 (0) 721 / 8100 – 1821

 Email: presse@zkm.de
www.zkm.de/presse

ZKM | Center for Art and

Media Karlsruhe

Lorenzstraße 19

76135 Karlsruhe

Supporter

swiss arts council



GLOBALE is a project as part of the city's birthday – 300 Years Karlsruhe



Sponsored by



Founders of the ZKM


 Baden-Württemberg
 MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST

Partners of the ZKM



Media partner



Exhibition system for GLOBALE: *Stadelmann Schmutz Wössner Architects'* display architecture for the *Infosphere* exhibition is an open system. Hierarchical display and maximum transparency replace enclosed spaces. The open, modular system reflects both the open spaces of the ZKM and the overarching artistic concept behind the exhibitions running as part of GLOBALE.

Press Release

August 2015

GLOBALE: Infosphere

Place
ZKM_Atrium 1+2

Period
Fri 04.09.2015 – Sun 24.01.2016

Press Conference
Thurs 03.09.2015, 11:00

Press Contact
Dominika Szope
Head of Press and
Publicity Office
Tel: +49 (0) 721 / 8100 – 1220

Regina Hock
Press and Publicity
Office Clerk
Tel: +49 (0) 721 / 8100 – 1821

Email: presse@zkm.de
www.zkm.de/presse

ZKM | Center for Art and
Media Karlsruhe
Lorenzstraße 19
76135 Karlsruhe

Supporter

swiss arts council

prohelvetia

GLOBALE is a project as part of the
city's birthday – 300 Years Karlsruhe



Sponsored by



Founders of the ZKM



Partners of the ZKM



Media partner



ANNEX

“To me, infosphere denotes that technical network of telegraphy, telephony, television, radio, radar, satellites and internet, which encompass the globe.” (Peter Weibel)

Nowadays, mankind lives in a globally networked society, in which biosphere and infosphere penetrate and depend on one another. The earth is surrounded by a mantle of air, which we call the atmosphere. It is the result of photosynthesis, the work of algae over millions of years, during which sunlight has been converted into air. Evolution’s answer to the atmosphere was lungs. For this reason, the atmosphere is vital to the lives of mankind and other mammals. We have also been surrounded by an *infosphere* for approx. 150 years. With this neologism, I denote that technical network of telegraphy, telephony, television, radio, radar, satellites and internet, which encompass the globe and facilitates the global exchange of data and the organisation of human and goods transportation. Without the global movement of data, products and people, the biological and social demands of more than seven billion people could not be fulfilled.

In the 19th century, new communication and transport routes were developed by machines on land, over water and in the air. Between 1886 and 1888, Heinrich Hertz generated the empirical evidence for the existence of electromagnetic waves through his radio experiments and proved that light exists from electromagnetic waves. So began the era of wireless radio technology, which facilitated the separation of messenger and message, so that data could traverse space without the body of the messenger. As a result, a densely woven communication and information network was created from mobile media in the 20th century: the infosphere – a mantle of radio waves encompassing the earth. Through artistic, technical organs, mankind can for the first time use the electromagnetic waves, for which he previously has no sensorium, to transmit words, images and other data without wires. Social media, which has changed our everyday reality, are part of these technical networks. For this reason, the equation of “Machinery, Materials, and Men” (Frank Lloyd Wright, 1930), which was valid in the 19th and 20th century, must be expanded for the 21st century to include the equation “Media, Data and Man” (Peter Weibel, 2011). Since the alphabetical code was supplemented by the numerical code, algorithms have been a fundamental element of our social order – from the stock exchange to airports. Against this background, contemporary art, which works in this field, is particularly relevant.

Peter Weibel

Press Release

August 2015

GlobALE: Infosphere

Place
ZKM_Atrium 1+2

Period
Fri 04.09.2015 – Sun 24.01.2016

Press Conference
Thurs 03.09.2015, 11:00

Press Contact
Dominika Szope
Head of Press and
Publicity Office
Tel: +49 (0) 721 / 8100 – 1220

Regina Hock
Press and Publicity
Office Clerk
Tel: +49 (0) 721 / 8100 – 1821

Email: presse@zkm.de
www.zkm.de/presse

ZKM | Center for Art and
Media Karlsruhe
Lorenzstraße 19
76135 Karlsruhe

Supporter

swiss arts council

prohelvetia

GlobALE is a project as part of the city’s birthday – 300 Years Karlsruhe



Sponsored by



Founders of the ZKM



Partners of the ZKM



Media partner

