

carsten nicolai + marko peljhan

POLAR^m
[mirrored]

new installation | commissioned by YCAM

13 November 2010 – 6 February 2011

Yamaguchi Center for Arts and Media [YCAM] <http://www.ycam.jp>

Admission free

The Yamaguchi Center for Arts and Media [YCAM] presents polar^m [mirrored], a brand new installation piece. Carsten Nicolai and Marko Peljhan, two artists who keep operating on the international stage, team up once every ten years for a collaborative investigation into the state, concept and informational environment of the ever-transforming "earth as environment" in the respective age. Part of this long-term project, this exhibition proposes a new understanding of human existence and living environments as formulated by the artists in the year 2010.

Nicolai and Peljhan are two internationally active artists who both deal with questions of art, science and technology and who have been collaborating occasionally since 1997, when they both took part in the documenta X contemporary art exhibition in Kassel, Germany. Both artists are researching and designing methods of environmental observation based on information and sensor technologies. With polar^m, they are proposing new perspectives on the global ecosystems. Their new work consists of two mirrored cubical spaces (one accessible and one not), a field of radiation generators and a system of radiation observatoria. It probes our understanding of the intelligence of nature and of human existence through the prism of radiation phenomena and their visualisation and sonification.

polar^m follows the conceptual traces of the initial polar project in 2000 which was concerned with the assumption of the global communications networks as an intelligent matrix. The initial thesis of polar was that the human created networks, with their exponential growth in complexity, begin to mimic indeterminate phenomena as we find them in nature itself. In the first polar the matrix of cognition of the Solaris ocean was the inspiration for a human created communications and cybernetic system, whereas polar^m ventures into a more in-depth understanding of the Solaris ocean.

The polar^m landscape explores the noise intelligence present in ephemeral and apparently random radiation phenomena through micro and macro transitions. Its spatial setup questions the relevance of the viewer, her or his presence within the space, and potential influence on it through the indeterminacy principle. The focus is on the work of art as an autonomous construction in a large, potentially infinite structure enveloped in an ocean of radiating particles.

Visual radiance together with different types of radiation (electromagnetic, alpha, beta, gamma) and associated sub-atomic particles are the dynamic triggers of the polar^m algorithms. These algorithms sonify and visualise the events transmitted from the instruments present in the landscape (geiger counters, cloud chamber, high frequency receivers, and granite radiation generators observed by robot-controlled sensors). The soundscape is generated through the coupling of indeterminate radiation events. Processes of nature, both man made and cosmic, which normally elude human perception, are temporarily brought down to a human scale.

About the work

Arranged in the exhibition space are several devices related to radiation and electromagnetic waves, and in the back, two cubic structures measuring 7 x 7 meters in width and 4 meters in height. They function as self-sustaining creation systems, and illustrate the phenomenon of earth and cosmic radioactivity and electromagnetic waves, both man made and natural. The spatial transformations manifested in elaborate motion graphics and sounds disclose new views of earth and cosmic radiation and radiance data.

Invisible data made perceptible with devices related to radiation and electromagnetism

Placed in front of the cubes are so called observatoria, a set of 5 Geiger counters, three high-frequency receivers, radiation generators in the form of a robotic arm that senses natural radiation from granite stones and whose behavior is determined by the measurements, and a cloud chamber. The Geiger counters measure the level of radiation inside the venue and generated from the rocks, in response to which the robotic arm determines its movement and investigatory behavior. The cosmic, earth and granite generated radiation patterns are also visible in the cloud chamber. These interconnected devices work together as a system of systems that allows us to experience the characteristics and sequences of radioactive particles and electromagnetic waves through algorithms that are designed to drive the radiant and sonic events inside the cubes.

Two symmetrically interacting structures: The installation's central elements and their question to the visitor

Two cube-shaped structures are arranged symmetrically on the left and right side. Visitors can enter one of them, while the other is completely enclosed by a projection membrane and cannot be entered. The latter, A', is a mirror image of the former, A, where both interfere with each other while constantly striving to achieve a state of balance. Each of the two structures is flooded with images and sounds that ceaselessly transform in an elaborate, dynamic fashion, creating a relationship between the two cubes. But why are there two symmetrically interacting cubes?

This is the question the artists ask the visitor and is the central theme of this exhibition.



About *polar* (2000)

The interactive installation *polar* was conceived and realized over a period of two years from 1998 for the tenth exhibition at Canon ARTLAB(*1).

Nicolai and Peljhan refer to Stanislaw Lem's science fiction novel *Solaris*, along with Andrei Tarkovsky's film adaptation, as a source of inspiration for their own work. The ocean on the uncharted planet *Solaris* in Lem's novel is a mirror that reflects human desires, and hints at the paradox of the expedition into the unknown as an exploration of mankind itself.

polar interprets the exploration of the ocean as an investigation into human existence in the information society in the year 2000, and questions the modes and ideas we may formulate in our future explorations of an increasingly unknown planet Earth composed of data. By focusing on the mystical phenomenon of "reflections with geometrical crystalline bodies" illustrated in the original story as one possible answer, the work aims to forge an environment in which such things as uncertainty principle and quantum mechanics can be experienced in connection with data networks.

Equipped with a special interface for gathering information, visitors enter the exhibition space in groups of two, and begin to collect various data (including surrounding imagery, sound, temperature, and gravitational acceleration). Once all data has been recorded, the measured values are analyzed, after which seven keywords/concepts – "crystal-crystallisation", "diagram", "stealth-stealthy", "machine-mechanic", "wave-waveform", "symmetry-symmetriad" and "spectral-spectre-spectral" – automatically appear on a monitor. Selecting one of them triggers the operation of a special intelligent information search system fed with various texts from Lem's *Solaris* and other sources. This mechanism gathers further keywords as individual bodies from various websites, and adds these to a permanently restructured database. At the same time, routing information of the paths to the respective accessed websites is visualized as undulating motion, whereas the entire exhibition space responds to the characteristics of the systems defined by the data and concepts collected by each visitor (pair). Through the generation of light and sound, the visitor can experience dynamic changes of the space itself as it seemingly transforms into different "crystalline bodies".

*1 Culture support project implemented by Canon Inc. between 1991 and 2000. The program was designed to promote especially the production of media art, and included the hosting of annual special exhibitions. The curators of this exhibition at YCAM, Yukiko Shikata and Kazunao Abe, were also in charge of the original *polar* exhibition at Canon ARTLAB in 2000.



polar (2000, Canon ARTLAB, Tokyo)

CARSTEN NICOLAI

Carsten Nicolai, born 1965 in Karl-Marx-Stadt, is part of an artist generation who works intensively in the transitional area between art and science. As a visual artist Nicolai seeks to overcome the separation of the art forms and genres through a holistic artistic approach. Further aspects of his works consider the integration of error and chance as well as the implementation of mathematical, physical and natural phenomena and theories. He is also interested in self-organizing processes, for example the growth of snow crystals.

After his participation in important international exhibitions like "documenta X" and the "49th and 50th Venice Biennale", Nicolai's works were shown in two comprehensive solo exhibitions at Schirn Kunsthalle Frankfurt, Germany (anti reflex) and at Neue Nationalgalerie in Berlin, Germany (syn chron) in 2005. In 2007 he had further extensive shows in Zurich and New York. Besides performing in club and concert halls, Nicolai also presented his audio-visual pieces at museums like Solomon R. Guggenheim Museum in New York, San Francisco Museum of Modern Art, Centre Pompidou in Paris, Kunsthaus Graz or Tate Modern in London. Additionally he pursues projects with diverse artists such as Ryuichi Sakamoto, Ryoji Ikeda (cyclo.), Blixa Bargeld, Michael Nyman, Mika Vainio or Thomas Knak (opto). He started collaborating with Peljhan in 1997 with the wardencylffe series of events, later the Solar performance and the polar series of works.

MARKO PELJHAN

A native of Slovenia and a theatre and radio director by profession, he founded the arts and technology organization Projekt Atol in the early 90's and cofounded one of the first media labs in Eastern Europe, LJUDMILA in 1995. He has been working on the Makrolab, a unique project that focuses on telecommunications, migrations and weather systems research in an intersection of art and science from 1997-2007, the Interpolar Transnational Art Science Constellation during the International Polar Year and is currently coordinating the Arctic Perspective Initiative art/science/tactical media project focused on the global significance of the Arctic geopolitical, natural and cultural spheres. Peljhan has also been the flight director of ten art/science parabolic experimental flights in collaboration with the Microgravity Interdisciplinary Research initiative and the Yuri Gagarin Cosmonaut Training Centre, creating conditions for artists to work in alternating gravity conditions.

He is the recipient of many prizes for his work, including the 2001 Golden Nica Prize at Ars Electronica together with Carsten Nicolai for their work, polar, and the UNESCO Digital Media Prize for Makrolab in 2004. During 2008, Peljhan was appointed as one of the European Union Ambassadors of Intercultural dialogue. His work was exhibited internationally at multiple biennales and festivals (Venice, Gwangju, Brussels, Manifesta, Johannesburg), at the documenta X in Kassel, several ISEA exhibitions, several Ars Electronica presentations and major museums, such as the P.S.1 MOMA, New Museum of Contemporary Art, ICC NTT Tokyo and others.

He holds joint appointments with the Department of Art and the Media Arts & Technology graduate program at the University of California Santa Barbara and was appointed as Co-Director of the UC Institute for Research in the Arts in 2009, where he is coordinating the art/science Integrative methodologies initiative. He has been collaborating with Carsten Nicolai since 1997.

Events

International symposium - 150 Jahre Freundschaft Deutschland–Japan “Decennial environmental observations in art”

13 November (sat) 13:00–16:00

Venue: foyer

Guests: Carsten Nicolai, Marko Peljhan, Andreas Broeckmann (Director of the Dortmunder U), Yukiko Shikata (Guest curator)

Moderator: Kazunao Abe (YCAM) *interpretation available

As a special event held as part of the festivities commemorating 150 Years of Friendship between Germany and Japan, this symposium is led by the artists and curators involved in this exhibition, together with a number of invited intellectuals from Germany and Japan. The artists discuss via a scientific standpoint supposed future developments and possibilities of modeling invisible data into visual or acoustic works of media technology-based art, and explore new ways of perceiving the environment while referencing Nikola Tesla's and other historical achievements, as well as current endeavors in the field.

YCAM SOUND TECTONICS #8 audiovisual concert “RASTER-NOTON EVENING”

13 November (sat) 19:00 start (18:30 open)

Venue: Studio B

Live: cyclo. (Carsten Nicolai & Ryoji Ikeda), byetone (Olaf Bender), nibo

Guest: Christopher Willits

Admission: Advanced tickets ¥3,000 / "any" members & special discounts ¥2,700 / Tickets at the door: ¥3,500

The polar project observing natural and informational environments, initiated by two internationally renowned artists, resurfaces after ten years in the form of the polar" exhibition. Via an original platform developed in order to monitor the invisible world of data, the visitor can experience polar electromagnetic force from a unique perspective on the environment. An exquisite lineup of artists from the field of electronic sound art/music will get together at YCAM to celebrate the exhibition's opening. Look forward to an overwhelming display of visuals and sound, designed with YCAM's own high-end technical equipment and setting.

Gallery Tour (17 times during the event period)

November 20 (sat), 21 (sun), 27 (sat), 28 (sun)

December 4 (sat), 5 (sun), 11 (sat), 12 (sun), 18 (sat), 19 (sun)

January 8 (sat), 9 (sun), 15 (sat), 16 (sun), 23 (sun), 29 (sat), 30 (sun)

14:00–15:00 / Admission free / Application: Please visit YCAM 1F Ticket Information prior to each tour

Through the tours, participants will discover together with YCAM educational staff, most attractive features of the exhibition.

About Exhibiton

Carsten Nicolai + Marko Peljhan “polarm [mirrored]”

New installation | Commissioned by YCAM

13 November (sat), 2010 – 6 February (sun), 2011 | 10:00–19:00

Yamaguchi Center for Arts and Media [YCAM] Studio A

Admission free

Closed on Tuesdays (the following day if Tuesday is a national holiday), 28 December–4 January

Curators: Yukiko Shikata (Guest curator), Kazunao Abe (YCAM)

Organized by: Yamaguchi City Foundation for Cultural Promotion

in association with: Yamaguchi City, Yamaguchi City Board of Education.

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Produced by: Yamaguchi Center for Arts and Media [YCAM]

International symposium - 150 Jahre Freundschaft Deutschland–Japan “Decennial environmental observations in art”

Co-sponsor: Goethe-Institut Japan in Osaka

YCAM SOUND TECTONICS #8

audiovisual concert “RASTER-NOTON EVENING”

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Inquiry

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