



Kunsthause Graz / BIX, 2003

Communicative display skin for the Kunsthause Graz

Location: Kunsthause Graz, Austria

Architects: Peter Cook & Colin Fournier, London, England

Client: Kunsthause Graz AG, Austria

Dimensions: approx. 900m²

Materials: Acrylic Glass, Fluorescent Tubes, Cable, Light Control System, Computer System, Customized Software

Project Status: Completed

Realization Budget: 450.000,- EUR [approx. 500.000 US\$]

Performances: Artistic & Technical Concept, Design, Planning, Supervision

Video: <http://vimeo.com/70466278>



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE

BIX is a matrix of 930 fluorescent lamps integrated into the eastern Plexiglas façade of the Kunsthause. Through the possibility to individually adjust the lamps' brightness at an infinite variability with 20 frames/second images, films and animations can be displayed.

The *BIX* concept was initiated and developed by the Berlin based artists & architects realities:united. Coming from an outside studio this additional architectural concept had to be merged short term into the ongoing planning work. This integration process was challenging for a diversity of reasons: after all *BIX* was a new element designed to entirely dominate the main façade of the Kunsthause thereby radically redefining the architectural concept of the building's skin.

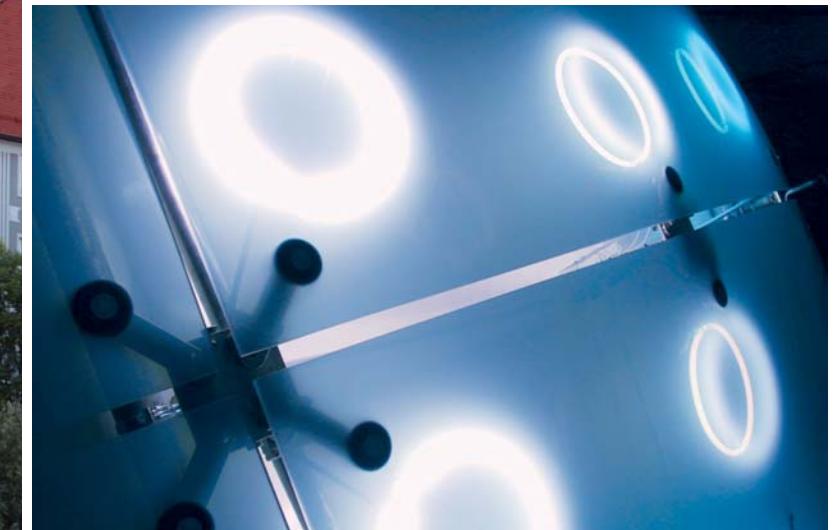
The *BIX* media installation and the Kunsthause' architecture share a strong symbiotic relationship. The façade as a display extends the communication range of the Kunsthause, complementing its programmatically formulated communicative purpose. In an abstract and mediated form the media façade transmits the internal processes of the Kunsthause out into the public.

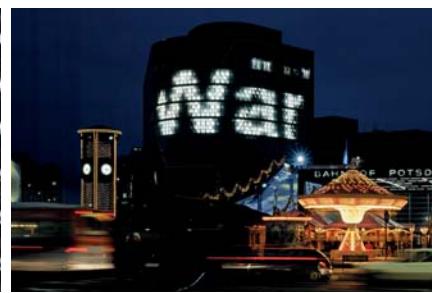
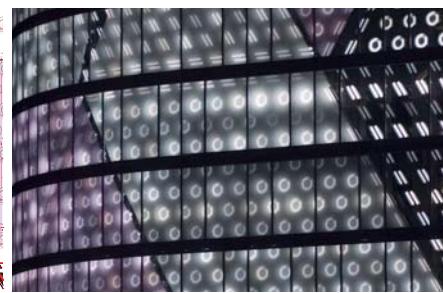
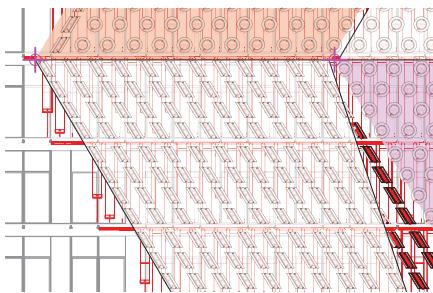
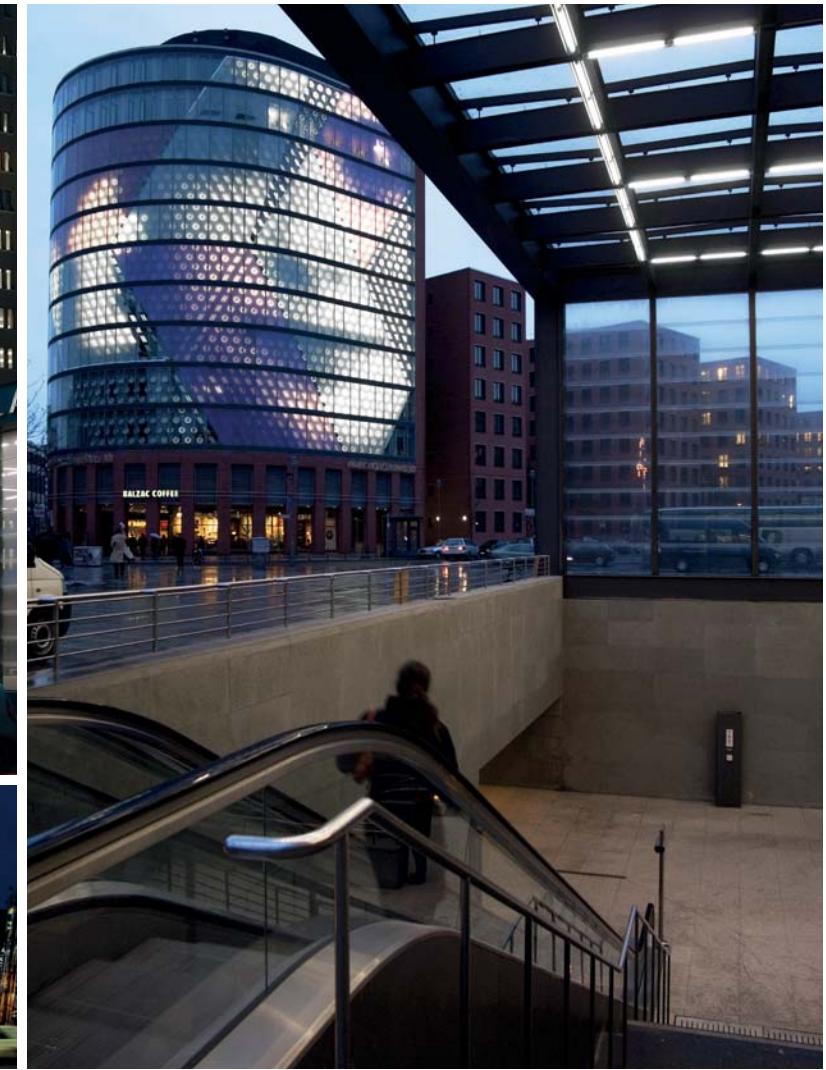
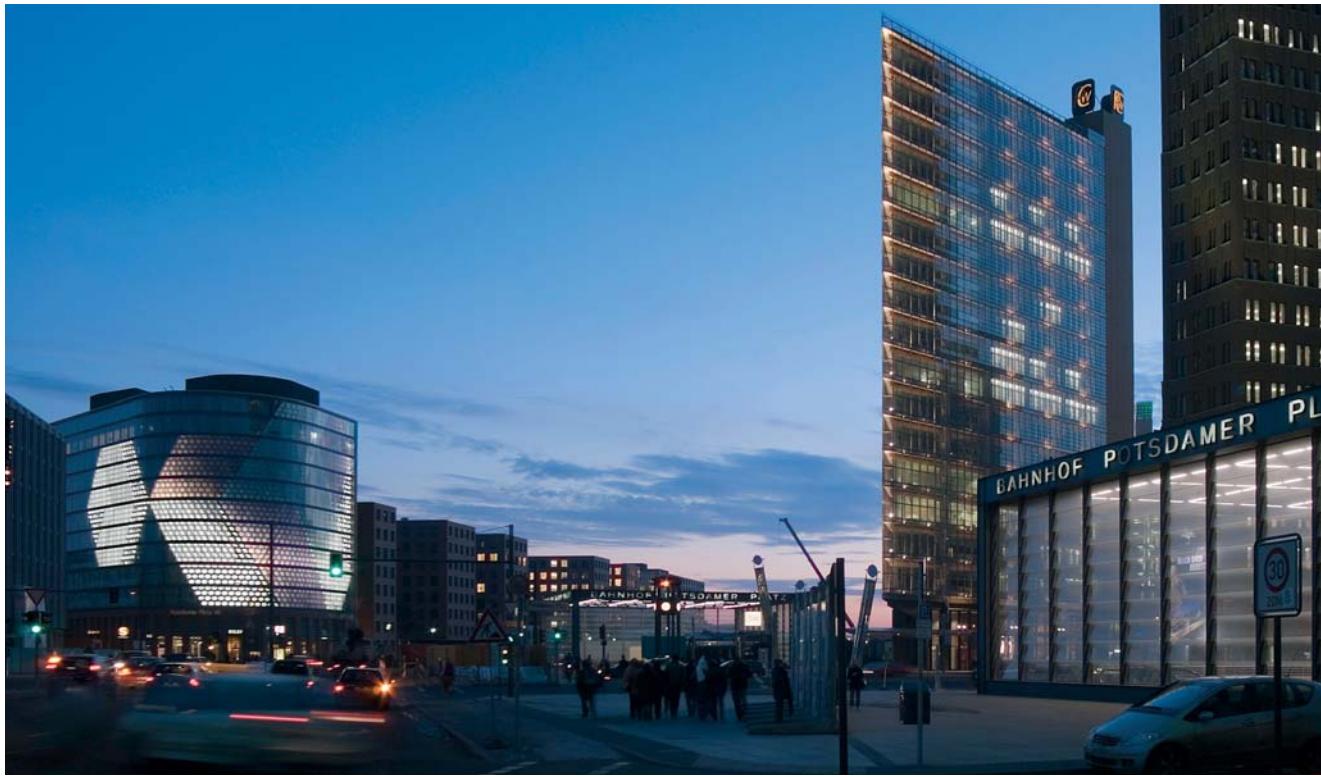
For the development of *BIX* central design features of conventional large screen displays had been abandoned in order to obtain a number of substantial advantages in exchange. On the one hand, the low image resolution imposes strong limitations. On the other hand, this "deal" enables both the modular structure and the huge size of the installation to be highly integrated into the architecture, covering practically the entire façade facing the riverside.

Not a separately mounted video wall but the Kunsthause itself radiates characters and images; thereby a maximum degree of integrity between building and image is achieved.

BIX is an experimental laboratory. As the content producer the Kunsthause has the chance to develop methods for a dynamic communication between building and surroundings, between content and outside perception. Hence a unique form of communication, consisting of vocabulary, syntax and rhythm needs to be created. With *BIX* artists can research alternative cultural and artistic principles, whose implementations on commercially used propaganda surfaces are widely excluded.

The specialized software tools which also belong to the *BIX* project are of outstanding significance for the efficiency and precision of this creative work.





SPOTS, 2005

Temporary light and media installation

Location: Potsdamer Platz, Berlin, Germany

Dimensions: approx. 1,350m²

Materials: Fluorescent Tubes, Cables, Light Control System, Computer System, Customized Software, Silk Screen Printed Adhesive Façade Covering

Project Status: Completed, Dismantled

Realization Budget: 750.000,- EUR (approx. 840.000 US\$)

Performances: Strategic Consultancy, Artistic & Technical Concept, Design, Planning, Software Conception, Site Management, Curatorial Conception, Program Art Curatorship, Operation

Video: <http://youtu.be/047K74NOUQM>



REALITIES-UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE

SPOTS was a project realized on extremely short notice, commissioned in February and inaugurated in November 2005. As part of an internationally oriented marketing campaign for an unoccupied office building on Potsdamer Platz, **SPOTS** aimed at a temporary, spectacular staging of the rather inconspicuous investor architecture, so that the greatest possible attention of international media would arouse the interest of potential tenants from afar.

Instead of simply copying the **BIX** installation at the Kunsthaus Graz—which would have met the client's expectations—**SPOTS** reacted specifically to the architecture and urban surroundings while continuing research on topics begun in Graz. Both projects investigate the scale, size, and resolution of media elements in an urban and architectural context as well as the general relation between medium, message, material, and location. But **SPOTS** went a few steps further—introducing a shifted light/pixel grid using different types of lamps as well as a distinct daytime appearance.

SPOTS was not to be a neutral carrier medium at all. The installation was in equal parts a medium and a separate structure, whose idiosyncratic matrix interfered with any content displayed. This “object character” was especially

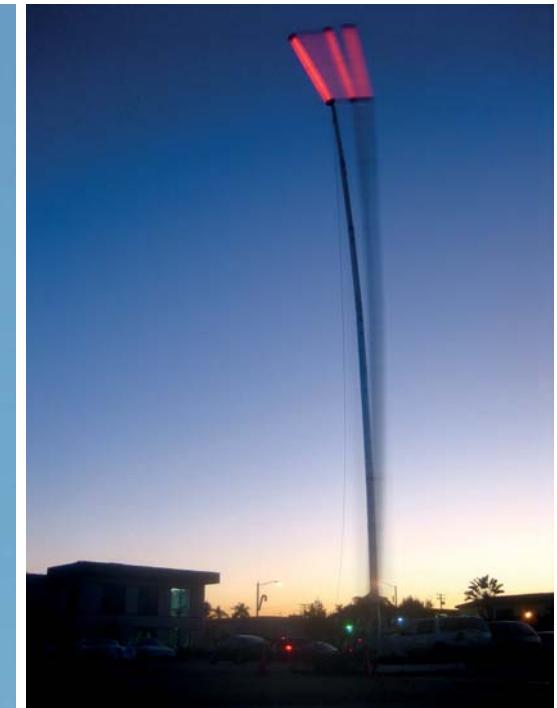
important, because the matrix of lamps was also visible by day—in contrast to the **BIX** façade. This character was created by the irregular outline of the display itself, which partially dissolved the physical façade of the architecture, as well as its division into two separate screens and the different types of lamps, which were arranged in a large graphic pattern with a 30 degree tilt and which were detailed as autonomous individual objects. The installation also involved a large-scale affixing of custom-made silk-screen printed colored foil with varying transparency to parts of the installation surface. This façade coating was visible by day, lending the arrangement of lamps additional variety, and by night it served as a diffusion screen for the individual lamps, resulting in a slight coloration of individual sections.

1,014 ring-shaped and 760 bar-shaped fluorescent light tubes served as pixels, forming a giant low-resolution, grey scale matrix. A central computer individually controlled the brightness of every single light. As a result, movies, graphics, and animation sequences could be displayed on the façade as moving luminous images transforming the building's shell into a communicative membrane. The aim was for the media installation to continue the structural logic defined by the architecture instead of concealing

or contradicting it. On the one hand, the considerable overall size of the installation became economically feasible by reducing the resolution and doing without color. But on the other hand—and more importantly—giving this media installation the right resolution, size, and dimension was a necessary prerequisite for acting on the architectural scale of the surrounding Potsdamer Platz quarter.

Over a period of 18 months, the installation was used to present a series of curated exhibitions with commissioned, site-specific art works from internationally renowned artists like Carsien Nicolai, Jim Campbell, and Rafael Lozano Hemmer, which were shown for a month each.

Questions regarding the pixels, the resolution, the screen, and the architecture have nurtured work on later projects (**AAMP**, **C4**, **Crystal Mesh**). Although each of these has formulated a very specific answer, taking into account the changed surroundings and circumstances, all of them mainly seek to create transitions and connections between media, architectural design, and displayed content.



PowerPlants, 2005

Kinetic light sculptures as a catalyst for and symbol of the transformation of a post-industrial urban development area

Location: Pasadena, California, USA

Collaborators: Niklaus Hafermaas / Uebersee (project partnership); Office for Structural Design (advising engineers phase one); Schlaich Bergermann and Partner (advising engineers phase two)

Dimensions: approx. 55 feet height

Materials: Steel, Acrylic Glas, Solar Panel, LEDs, Microcontroller

Project Status: Prototype realized, realization on hold

Realization Budget: approx. 80.000 US\$

Performances: Artistic & Technical concept, technical research, design, planning, site management

Powerplants is a land art project for the site of a former power plant in Pasadena, which is being redeveloped as a new expansion for the Pasadena Arts Center, as well as for a planned development park consisting of high-tech businesses and offices. This transformation from an old power plant to what has been named the "Glenarm Innovation Corridor" was in need of an artistic strategy to visually accompany and support the ongoing urban (re-)development over the years to come.

A singular symbol in just one location quickly revealed itself to be an unfeasible solution here: the grounds are expansive and very eclectic due to their heterogeneous construction. Not so expansive was the low budget for "public art", which the city set aside for the project's development. That's why a modular concept was developed, which could be extended at any time through additional private investments in connection with expected business settlements moving into the Innovation Corridor, thereby adopting and strengthening the area's artistic (and professional) aura.

The proposal is a conceptual strategy superimposing new, modular and interconnected structures on the remains of old industry. The structures bridge the gap between industry, nature and information technology. They are a new breed of *Powerplants*, with slender stalks reaching about 55 feet into the sky, the same height as the famous palm trees of Southern California. Each topped by a cylindrical light tube, they emit soft and pulsating light signals powered by solar energy stored during the day. The metal structure is reminiscent of the site's industrial history and allows movement via light breezes, swaying gently in the wind like the palm trees. It is, however, strong enough to withstand storms and earthquakes.

Because of their sculptural qualities, *Powerplants* are effective as single objects as well as in small or large groups. Connected via a wireless communication network, they are programmed to exchange light impulses with each other, create abstract light configurations or glow in unison. Because they are physically independent from each other and electrically self-sustainable, there is no need for wiring, thereby making it possible to "plant" and "replant" them in any given sequence and arrangement.

They can therefore react flexibly to the area's development, which is set to occur over the next two decades. They can expand, reproduce, or retract piece by piece, or be concentrated in one area. After successfully constructing a prototype *Powerplants* was put on hold for administrative reasons. The future is uncertain...





Museum X, 2006

Urban art installation and museum interim for the Museum Abteiberg

Location: Theatre Moenchengladbach, Germany

Client: Museum Abteiberg, City of Moenchengladbach, Germany

Dimensions: approx. 65,000m³

Materials: 60 Textile-Covered Steel Frames with Inkjet Prints, Inscription "Museum", Foyer Installation, Illumination, Flagpole & Flag

Project Status: Completed, Dismantled

Realization Budget: 80.000,- EUR (approx. 90.000 US\$)

Performances: Artistic Concept, Design, Planning, Supervision

Video: <http://vimeo.com/70553840>

Museum X was conceived as a temporary installation in Moenchengladbach to act as a surrogate and social place-holder for the Abteiberg Museum while it was closed for renovation.

The central motivation behind this project was to expand beyond the original program of "sculpture as urban sign," into the realm of "museum as sculpture."

Through the use of large façade panels and other components built into and on the hulk of the centrally-located 65,000 cubic-meter structure, the former Moenchengladbach Theatre was transformed into an imaginary museum building designed in the distinctive style of Postwar Modernism. This clearly discernible illusion of a cultural building, conceived as an "urban status symbol," is detailed all the way through to the entrance foyer, which is staffed with *ersatz* museum personnel and which ends with a rear wall.



This hybridization of billboard, urban revitalization project, and art sculpture undermines and exceeds all preconceived expectations, hereby gaining the necessary freedom to establish an even more ambitious starting-point for the Abteiberg Museum and its programmatic enhancement upon reopening.

Even though it stands in direct opposition architectonically, this installation can be understood as a direct reference to the original Moenchengladbach Museum, which was designed by the internationally renowned architect Hans Hollein in the seventies. As with Hollein's structure, the *Museum X* architecture also reflects its context in civic development within the center of Moenchengladbach. By choosing the theatre building, which is currently slated for demolition, *Museum X* occupies and defines a focal point for the passionate discussions about the evolving character of Moenchengladbach and its social self-conception.

In particular *Museum X* calls attention to the planned transformation of the former theatre, along with its urban surroundings, into a shopping mall. This stark restructuring of an outdated urban model, which would place a "cultural crown" in the city centre, also comments critically on the unquestioning notion that a 30,000 square-meter shopping mall might have some sort of magical healing power on the decrepit main shopping street of Moenchengladbach. It criticizes the retreat of the local politicians from the planning of such urban developments, and condemns their handing over of this decision-making process entirely to, and to the benefit of, the project developer.



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE



AAMP, 2007

Media art installation - mediating and merging a commercial hi-res billboard and architecture

Location: Wilkie Edge, Wilkie Road, Singapore

Architects: WoHa, Singapore (Building)

Client: Capitaland Singapore

Dimensions: approx. 1,000m²

Materials: Colour LED Modules, Wiring, Light Control System, Computer System, Custom Software

Project Status: Completed

Realization Budget: 950.000,- EUR (approx. 1.050.000 US\$)

Performances: Artistic & Technical Concept, Design, Planning, Realization, Supervision

Video: http://www.realities-united.de/#PROJECT_140,3,V22



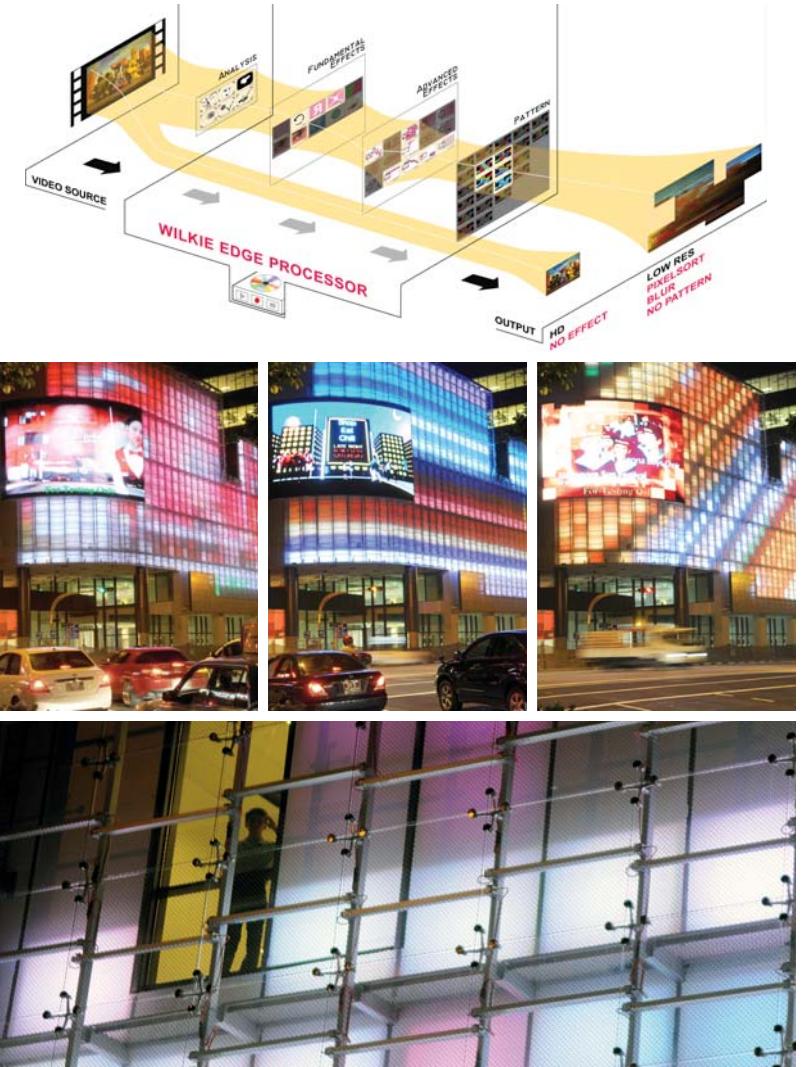
REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE

In most cases commercial media billboards are simply attached to buildings, ignoring their architectural concept since –by nature– they are programmed solely to attract maximum attention. Maybe there are ways to put both sides in a more synergic relationship. The "Architectural Advertising Amplifier" (AAMP) is a permanent generative media art installation at "Wilkie Edge", a mixed commercial development in Singapore. AAMP is creating transitional aspects between a commercial LED billboard that had already been set into the façade and the actual architecture of the building.

AAMP is a large-scale low-resolution matrix of 546 full colour, computer-controlled LED lights turning the entire curtain wall glass façade of this office building into an irregular screen augmenting the high-res commercial screen. It invades the interstices of the building's façade construction, turning it into a layered collage in which the commercial screenings are digitally echoed and dynamically blended with the "material" architectural elements.

Installed in the outer layer of a double skin façade, each of the individual LED lights is used as a "light projector" inducing a square color projection onto the inner hull. The Venetian blinds in front of the office windows serve as projection screens; in the evenings, when the employees leave their offices, motion sensors signal a central control system to close the windows. Step by step, an area of more than 800m² of the façade is thus transformed into a very large screen display with an extreme low resolution. The lit window rectangles of offices still in use punctuate the digital image here and there and give view to the activities behind. In this way, the dynamic exchange between material and media becomes a persistent plot: sometimes controversial, sometimes like a rehearsed choreography. This media installation does not cover up, but transforms the architecture to become a carrier of digital information and an urban landmark at the same time.

To create its continuously changing content, AAMP "hijacks" the never-ending stream of commercial content displayed on the LED billboard: A specialized

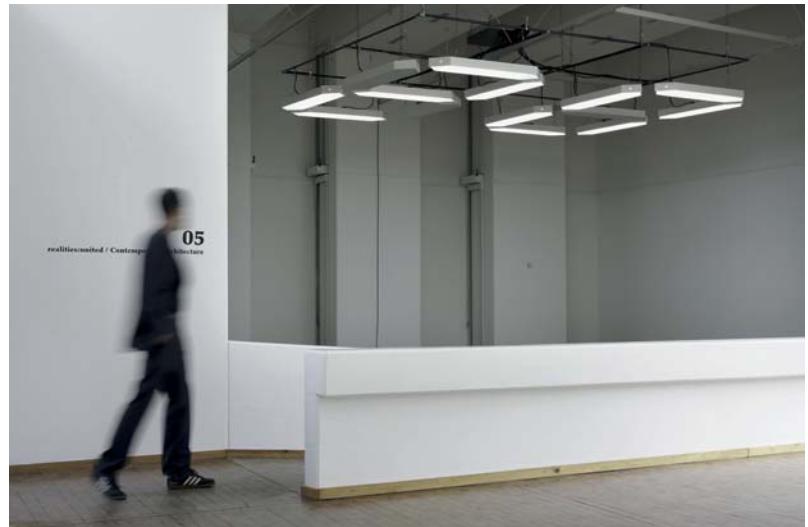


artistic software permanently analyzes this content and transforms it into a visual colour-echo that is displayed on the AAMP installation in real time.

Triggered by the results of the software's image analysis, various algorithms are applied to automatically "digest" the incoming images and generate a never-repeating artistic interpretation.

Although the resolution of the installation is extremely low, the displayed abstract images and patterns maintain an astonishing degree of legibility as the human brain manages to link and associate the colour patterns back to the original moving images displayed on the commercial LED billboard.

While commercial LED billboards on most buildings remain "anti-architectural elements," AAMP is an attempt to generate a transitional joint between the realms of art, architecture, and advertising. Maybe it can help to enrich the ongoing discussion about the use of large-scale advertising as an undeniable element of today's urban reality.



Contemporary Architecture, 2007

Art installation on the growing sophistication of functional lighting

Location: Artists Space Gallery, New York City, USA

Dimensions: approx. 4m x 3,5m

Materials: Fluorescent Lights, Wiring, Light Control System, Computer System, Custom Software

Project Status: Completed

Realization Budget: 25.000,- EUR (approx. 30.000 US\$)

Performances: Artistic & Technical Concept, Design, Planning, Software Conception, Manufacturing, Installation

Video: <http://vimeo.com/70537967>



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE

Contemporary Architecture is a minimalist art installation challenging the possibilities of using parts of the building equipment as both aesthetic and functional elements at the same time.

The installation offers visitors a couch and a TV showing several realities:united projects.

Above this cozy setting hangs an arrangement of 14 standard industrial fluorescent lights forming a very simple digital display: as two seven-segment digits of a digital clock. The function of the room's lighting is thus augmented—it is simultaneously a light sign, information carrier and light source. As an information carrier, the installation shows the current time in minutes. As a light installation, it is the only light source in the exhibition space.

The installation's controls continually synchronize the individual lights' intensity, therefore keeping the space's illumination constant while a changing numbers of lights is used to display the current time.

Contemporary Architecture is about the unused potentials hidden in our everyday environment (>*LightSpell*). From lighting to air conditioning to security systems and heating, increasingly large amounts of technology are included in every building. But instead of using this technology as a medium for architectural expression, architects still tend to view it as alien and try to make technological elements as invisible and unimportant as possible. In this sense the installation's design is the idea rather than the object. The "normal" lights are connected and re-arranged in a manner that results in an effect greater than the simple sum of its parts (>*SPOTS, BX*). The goal is to collect and organize the environment in a subtle, non-intrusive, yet fundamentally altering way, perhaps even adding some playfulness without an overt aesthetic agenda.



Crystal Mesh, 2010

Artistic ornamental granulated light- and media façade for the ILUMA Urban Entertainment Centre Singapore

Location: Iluma, Victoria Street, Singapore

Architects: WoHa (Building), Singapore

Client: Capitaland Singapore

Dimensions: approx. 3,500m²

Materials: Polycarbonate, Aluminium, Steel, Compact Fluorescent Lamps, Wiring, Light Control System, Computer System, Custom Software

Project Status: Completed

Realization Budget: 4.000.000,- EUR (approx. 4.500.000 US\$)

Performances: Artistic & Technical Concept, Design, Planning, Supervision

Video: <http://vimeo.com/3473657>

Crystal Mesh is a façade for the building complex "ILUMA" in Singapore. It combines aspects of a conventional curtain façade with those of a light installation or monitor- façade. *Crystal Mesh* forms the building's visual hull; the construction-physical functions are carried out by another exterior wall deeper inside. *Crystal Mesh* consists of a tessellated pattern made of 3,000 modules of deep-drawn polycarbonate covering a façade area of more than 5,000 m². About 1,900 of these modules contain a regular matrix of compact fluorescent light tubes forming "active patches" within the façade. At night the light matrix superimposes the idiosyncratic physical structure of the white, crystalline daytime façade. But the irregular arrangement of these patches – dividing the façade into areas with different resolutions – does not create a large, homogeneous screen in front of the building, but instead forms a more general impression of the building's "media-ness" as a surplus to and an essential ingredient of its architecture.

Conceptually, *Crystal Mesh* is a "bastard". Its function and design recall historical ventilation façades, the modular façade designs of the 1960s and 1970s, and the analog light-bulb aesthetic in the entertainment districts of the

20th century. At the same time, it also contains the "futuristic" concept of the monitor as complete substitute for the conventional façade construction: the façade as digital medium. These divergent themes have been put together in a formal design system – not in hegemonic addition, but as a mutual interpenetration, overlaying, and masking, which leads in detail to substantial interference between individual aspects.

The original idea of the commission – the façade as monitor – is simultaneously realized and obstructed by the modular and crystalline façade system. The large-format structure of the polycarbonate crystals can depict only 75 percent of the underlying matrix; the "monitor" is thus "perforated". In addition, the surface of each individual "pixel" is severely distorted by the modules' idiosyncratic geometry.

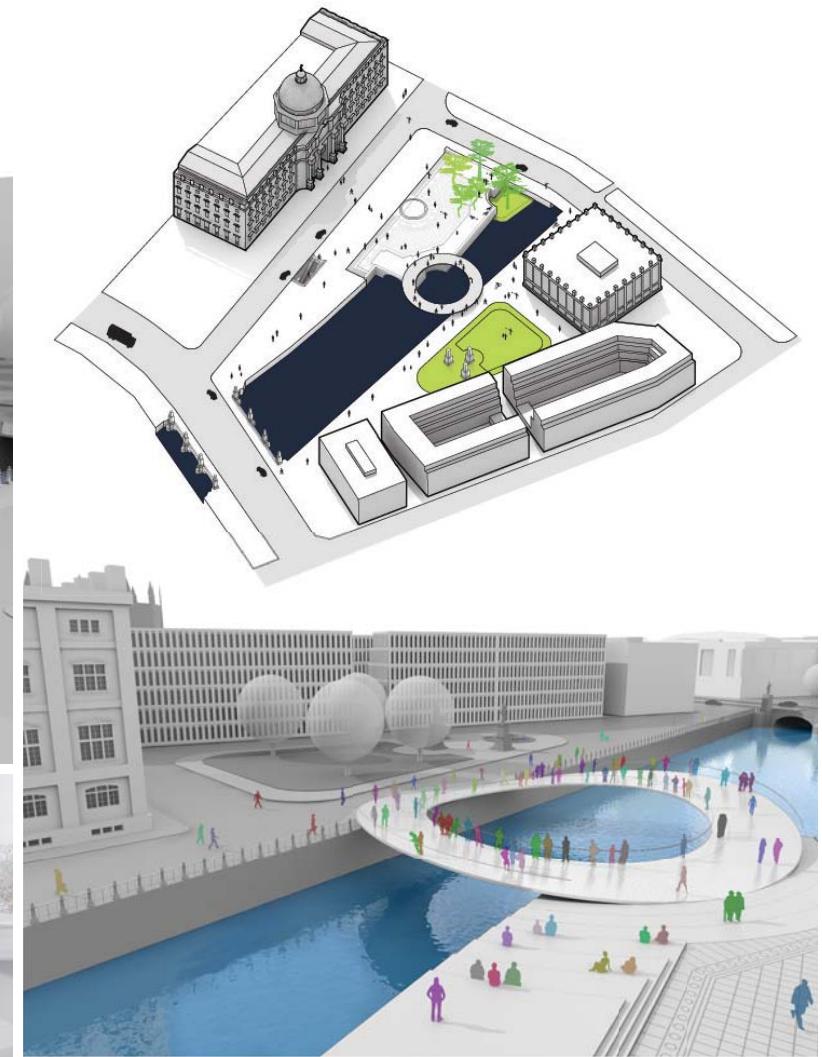
As a whole, therefore, there is no central, high-resolution monitor. Instead, the active light elements are distributed in coherent groups across the entire surface, sometimes at small, sometimes at large intervals. A "normal" depiction of high-resolution motifs cannot provide coherent results in this way. This eschewal of the characteristics of a monitor is balanced by the complex

overall effect on the scale of the city. Because the focus of the efforts is not an individual motif in digital staging, but being able to alter the character of the building's skin and thereby to achieve a dynamic expression of the entire architecture.

The central idea of the design is not that of a monitor, but of a façade with changeable expression. Accordingly, the active [night] appearance and the [day] appearance have equal rights in the design. The façade sends light signals during the day, as well: reflections of sunlight in the folded aluminum reflectors of the polycarbonate modules.

Turning away from the idea of the monitor is also reflected in the development of new artistic content. This process initiated with *Crystal Mesh* ultimately aims at the installation of an architecture that is as dynamic as it is specific. On this façade, normal films or animations are difficult to screen; special contents must be created for it.





Monument to Freedom and Unity, Berlin, 2010

Award-winning competition entry

Location: Schlossplatz, Berlin, Germany
Collaboration: BIG Architects, Copenhagen, Denmark
Client: Federal Office for Building and Regional Planning, German Government
Dimensions: approx. 36m Ø
Materials: Steel, Stainless Steel, Concrete, Wood
Project Status: Unrealized
Realization Budget: 9.000.000,- EUR (approx. 10.000.000 US\$)
Performances: Artistic & Technical Concept, Design

The design is a bridge in the form of a ring that extends across the Spree Canal to connect the historical monument pedestal (once supporting a gigantic monument for Kaiser Wilhelm I) with the other side of the Spree (Schinkelplatz).

The figure expresses simplicity, clarity, and determination. It effects a surprising transformation of its surroundings. It expands the contour of the historical monument and shifts its emphasis.

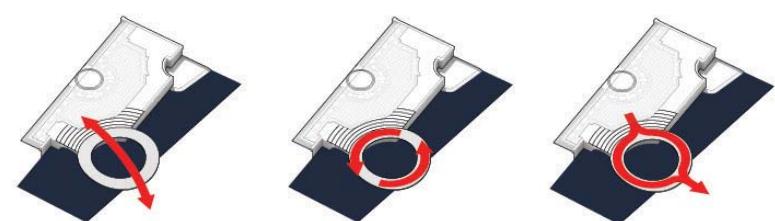
The ring form and the bridge gesture are simple metaphors for freedom and unity. The combination of the two aspects creates an image of the history of division. The common path divides into two running separately. At the goal, the two sides are united again.

In the background is a second story that is also important. The monument as bridge fundamentally alters the function and message of the historical body of the foundation. The bridge takes it away from the City Palace, turns it, and connects it more powerfully with the bourgeois city and its democratic society. What was previously a risk for the new monument – the site's ambivalence – is

thus not ignored or concealed. On the contrary, it is worked with and made the second central motif of the monument.

The thoroughness and differentiation with which the monument fits into the historical context – and with which it upsets leftists and conservatives, the old

and the young as equally as possible and then reconciles them again – preclude any one-sided ideological co-optation of the monument. In this way, the monument remains open for all and has a chance to indeed become a site for unity.





2x5 (Brothers), 2012 Kinetic public art installation

Location: Perry & Marty Granoff Center for the Creative Arts, Providence, RI, USA
Architects: Diller Scofidio Renfro (Building), NYC, USA
Client: Public Arts Committee, Brown University, Providence, USA
Dimensions: 180cm x 440cm (WxH/Unit)
Materials: Aluminium, Steel, Motor-driven Winding Cores, Fluorescent Tubes, Textile, Thermosublimation Prints, Micro Processor, Custom Software
Project Status: Completed
Realization Budget: approx. 140.000 US\$
Performances: Artistic Concept, Design, Planning, Production, Realization, Supervision, Installation
Video: <http://vimeo.com/70483705>

2x5 (Brothers) is a permanent kinetic light installation for the new "Perry and Marty Granoff Center for the Creative Arts" by the architects Diller Scofidio + Renfro. The art installation has been realized for Brown University in the framework of a public art competition with international invitations.

2x5 is a time-based work and makes use of an established commercial technical format known from the advertising industry: the installation consists of two mechanical "poster scrollers" in a special format. The identically constructed machines are each ca. 4.4m tall and 1.8m wide. Motor-driven winding cores are mounted above and below in the casings. Each pair of winding cores has 5 abutting, full-surface monochromatic coloured prints on textile stretched between them that can be scrolled to appear behind a glass surface, illuminated from behind.

The behavior of the two apparatuses is coordinated through a shared control mechanism. Usually, both of the two poster scrollers show the same colour surface, or at least each apparatus shows one full colour surface.

Occasionally, however, the two canvases stop in the half- or quarter-position, so that an apparatus shows two colours at the same time. Also the intensity of the backlighting can be adjusted in accordance with the stopping positions of the colour surfaces.

The installation is controlled via a series of algorithms that influence the speed and synchronicity of the behavior of the two scrollers, the colour (or colour combination) appearing on each scroller, and the intensity of the backlighting. The complexity of the installation's behavior is temporally coupled to the progress of the university's year. At the beginning of the academic year, the machines tend to both show the same colour equally intensely backlit, and the changes are usually fundamental, i.e., from one colour entirely to another.

In the course of the year, the probability increases that the two machines will show behavior independent of each other. Then the spatial experience is shaped by up to four different colours of differing intensities at once.

With two to four changes per day the frequency of the change is so low that visitors initially experience the installation mostly as static in the respective configuration. The users of the building – mostly students or University staff – can only perceive the changes of the colour code, and especially the creeping erosion of the installation's behavior pattern after a longer period.
Wasn't there something else yesterday?





TransReflex, 2012 Façade installation for Kunstmuseum Magdeburg

Location: Kunstmuseum (Museum for Art) Kloster Unser Lieben Frauen, Magdeburg, Germany
Client: Kunstmuseum Kloster Unser Lieben Frauen
Dimensions: 300cm x 150cm (WxH/Panel)
Materials: Steel, Stainless Steel, Linear Motors, Electronic Control System
Project Status: Completed
Realization Budget: 160.000,- EUR (approx. 180.000 US\$)
Performances: Artistic Concept, Design, Planning, Realization, Supervision

TransReflex is the title of the installation realized on the façade of the art museum Kloster Unserer Lieben Frauen in Magdeburg.

TransReflex consists of 17 large-format mirror panels that can be opened up out of the plane of the façade at different angles or else shut to close the façade. The reflecting panels integrate and reproduce the surrounding urban architecture, creating visual activity and vibrancy.

Each of the 17 movable panels are 150 cm wide and 300 cm tall and mirrored on both sides. The panels are installed in front of the 11 large windows on the museum's northern façade and the six windows on its eastern façade. The components move without uniformity, because the hinges are attached to different sides of the windows. Some windows open to the left, others to the right or up or down.

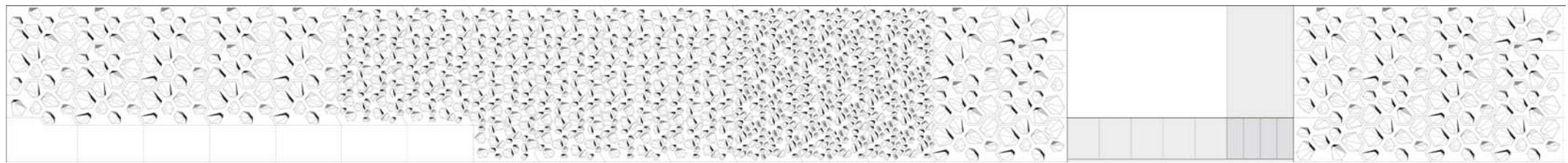
With the panels aligned at different angles and in different directions, the installation reflects different fragments of the surroundings. The resulting collage of mirror images mixes two opposite realities: the former cloister construction, which is Magdeburg's oldest extant building; and the postwar modernist buildings erected with little urban-planning context as if in the front yard of the cloister ensemble.

The dissolution and recombination of the relations between the views works in both directions: for a gaze from the outside onto the building, and for the gaze from the inside looking out. When closed, the panels together form one surface with the façade, and thus a homogeneous level of reflection.

The work was supported by the *Kunststiftung Sachsen-Anhalt*, the *Kloster Bergesche Stiftung* and the *Freunde und Förderer des Kunstmuseums Kloster Unserer Frauen Magdeburg e.V.*

Video: <http://vimeo.com/37940779>

REALITIES-UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE



C3A, 2012 Artistic multi resolution multi scale light- and media façade for Córdoba Contemporary Art Center

Location: Centro de Creación Artística Contemporánea de Andalucía, Spain

Architects: Nieto Sobejano, Madrid, Spain

Client: Nieto Sobejano Architects & Andalusian Government, Spain

Dimensions: approx. 110m x 11m

Materials: Glas Fibre Reinforced Concrete, White LED Lamps, Wiring, Light Control System, Computer System, Custom Software

Project Status: Completed

Realization Budget: 850.000 EUR (approx. 950.000 US\$)

Performances: Artistic & Technical Concept, Design, Planning, Supervision

Video: <http://vimeo.com/70487195>



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE

The winning competition entry for the "Espacio de Creación Artística Contemporánea" by Nieto Sobejano Arquitectos proposed the integration of a low-resolution light and media façade on the building surface facing the Río Guadalquivir.

Subsequently realities:united further developed concept and design for this media skin in close cooperation with the architects. The starting point for C3A was an analysis of the significant inner structure of the building, which is made up of a tessellated (self-repeating) pattern of polygonal rooms. The inner motif is translated to form a characteristic outer topography on the façade. The surface is made of fiberglass-reinforced cement (GRC) and shows a system of irregular shaped indentations of varying density and size. Those "bowls", which are geometrically derived from the building's floor plan, are individually lit to become "pixels" of a large display system.

To transform the façade into a light and media display without fundamentally changing its solid appearance as envisioned by Nieto Sobejano turned out to

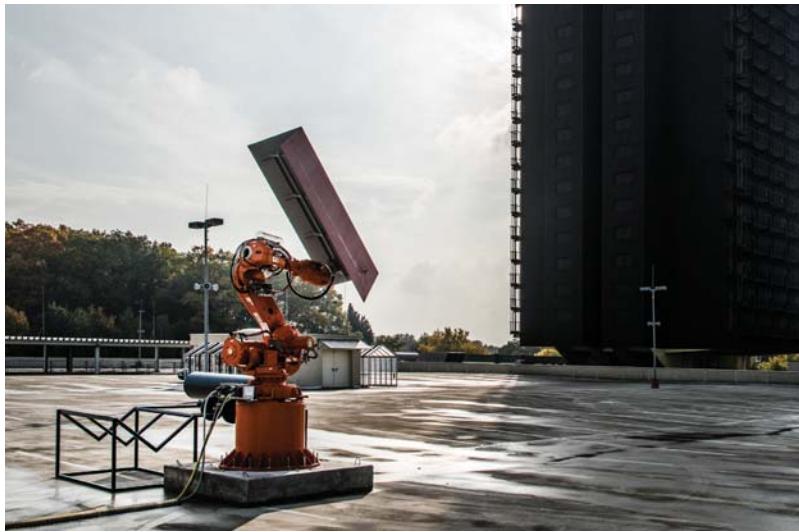
be the biggest challenge in the project. The façade is accordingly designed to deliver a facile and solid appearance in the daytime while it turns at night into a unique and dynamic communication wall that reacts very specifically to the architecture. The 100-meter façade consists of 1,319 hexagonal, recessed and pre-fabricated "bowls" on different scales. Each of the bowls serves as a reflector for an integrated artificial light source. The intensity of each lamp can be controlled individually, forming a huge irregular low-resolution grey scale display. The thorough immersion of the "pixel-bowls" – like negative impressions – in the volume of the facade turns the architectural scheme itself into a digital information carrier. During the day, the façade shows a three-dimensional landscape with no sign of being a media façade. Additionally, this tectonically modulated surface topography is characterized by a playful composition of light and shadow that constantly changes with the movement of the sun.

Three different scales of bowls are employed and distributed in huge patterns over the total façade, thereby subtly echoing the building's architectural elements. Additionally, each bowl appears to be unique in shape and size; and their distribution appears to be irregular. Only the distribution density stays

consistent. Analogously to the eye's retina, this composition allows the definition of areas of varying density or "sensitivity" on the façade. This analogy offers a certain artistic freedom: the resolution of the displayed images can stay low, fitting the blown-up scale of the screen, creating a mode of display in which the motifs are hinted at, rather than unambiguously presented.

The interest in the aspect of "visual acuity" stems from earlier projects and extensive research on the process of visual perception. For visualizations with very low resolution, the precognition of the brain determines whether an image or animation can be recognized. A motif that has been displayed at a higher resolution can be shifted to much lower resolution and still preserve its readability.

In connection with this media art center's field of work, possibilities of application arise that are interesting for the installation C3A. Ultimately, here too, a suitable language must be developed to mediate between the art institution and the city it faces.



Sender, 2013

Temporary installation & performance for Urban Lights Ruhr Festival

Location: Turmarkaden, Bergkamen, Germany

Client: Urbane Künste Ruhr

Dimensions: variable

Materials: Industrial Robot, Custom Tools, Computer System, Software

Project Status: Completed

Realization Budget: 60.000,- EUR (approx. 70.000 US\$)

Performances: Artistic & Technical Concept, Design, Planning, Realization

Video: <https://vimeo.com/108553735>

Sender is a temporary installation as part of the light festival Urban Lights Ruhr, presented by Urbane Künste Ruhr. Mounted on the parking deck of local Turmarkaden shopping center, a single-arm robot performs gestures of waving and signaling with different objects. The industrial robot, about 3.10m in height, has access to 4 different objects that it can pick up and lay down separately. The actual signaling choreographies are influenced by the local light and weather conditions.

Sender is a performance with neither a beginning nor an end. The installation is situated in a no place, an abandoned parking lot on the roof of a hardly used shopping mall. Right next to it, an untenantied tower building awaits the wrecking ball.

The main objective of the industrial robot is to continuously perform large and simple gestures of waving. During the day it uses a signal flag, at night, a lightsaber. In addition, the device's automatic tool changer can pick up two additional tools, a dumbbell and a portable roof.

It's a lonely sentinel. It's uncertain whether the signals reach anybody in the distance. Nobody answers. Counterpart and addressee remain unknown. Maybe it's the old city center "Nordberg", a kilometer away, which has yet to make the desired connection to the "new center". The signs can be seen from the new 70s town hall, right across the street, and probably from outside the city.

No human but a robot is performing the simple but oversized choreographies. The high-tech machinery unwaveringly stays in motion - it's not unemployed, yet "underloaded". In any case it acts out of its usual domain. The machine, native to the automobile industry, has been retrained. It remains unresponsive to the provocation of an empty parking lot, it resists restocking the missing cars through its own production: It already tackled a new task.

The flag waved diurnally, is yellow and red, two colours of Bergkamen's sigil. In maritime codes, the flag also means "man overboard" but the machine exudes no panic or hectic arousal. The signs are not desperate calls for a vitally important and maybe final action. Far from it: The machine is set for a long-term, lasting and diligent performance of the tasks. In bad weather conditions, it pauses under the mobile roof at hand. Regular dumbbell training underlines the will to endure or even improve over time.

The untiring and firmly sprung movements and the unrelenting nature of the robot express clarity and determination. The unfailing accuracy of the movements or the choreographic precision of picking up and laying down the tools imply the importance of every detail in the performance.

The waving movements are executed in ritual perfection, analogous to the consistently trained "Kata" of Far Eastern martial arts. These are performed with no adversary or recipient – the *Sender* is also the receiver. The drill is an end in itself, a form of meditation as an act of self-refinement.



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE



Ad Fontes, 2014

Proposal for a usable pavilion

Location: Reichenfeld, Feldkirch, Austria

Client: VLOW! Award 2014

Dimensions: 11,40m x 14,40m

Project Status: In Planning

Realization Budget: n.a.

Performances: Artistic & Technical Concept, Design

Ad Fontes is the proposal for a usable/serviceable pavilion which stands for the vision of a persisting upgrade of green public space to become a second centre within the inner city. A social space to meet, interact, perform, work and learn.

The spatial intervention *Ad Fontes* mainly consists of an elevated platform, open to all sides. It is protected from sun and rain by a light roof structure. The surface of the platform is equipped with a dense pattern of power outlets – available to the visitors free of charge. In general, the platform offers today's elementary infrastructure: shelter, electric power and free and open WiFi.

Typologically a classic, public and non-commercial bandstand within a park, the external appearance of *Ad Fontes* plays with the vain yet alluring glamour theme of bumper car rides, as typically found in amusement parks of the 20th century. Their focus of creating a parallel reality through the excessive use of (once precious) artificial, colourful and flashing lighting [cf. also Fremont Street, Las Vegas] is reflected within the pavilion's topics of [now] free electricity and free access to the virtual world, the internet adds to our lives.

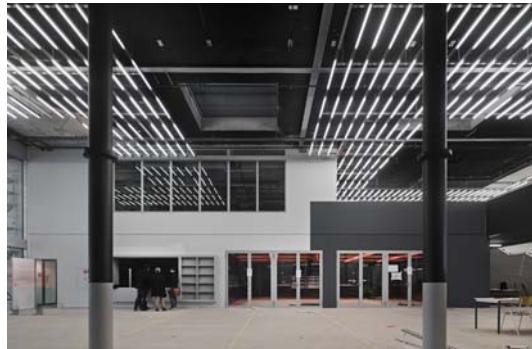
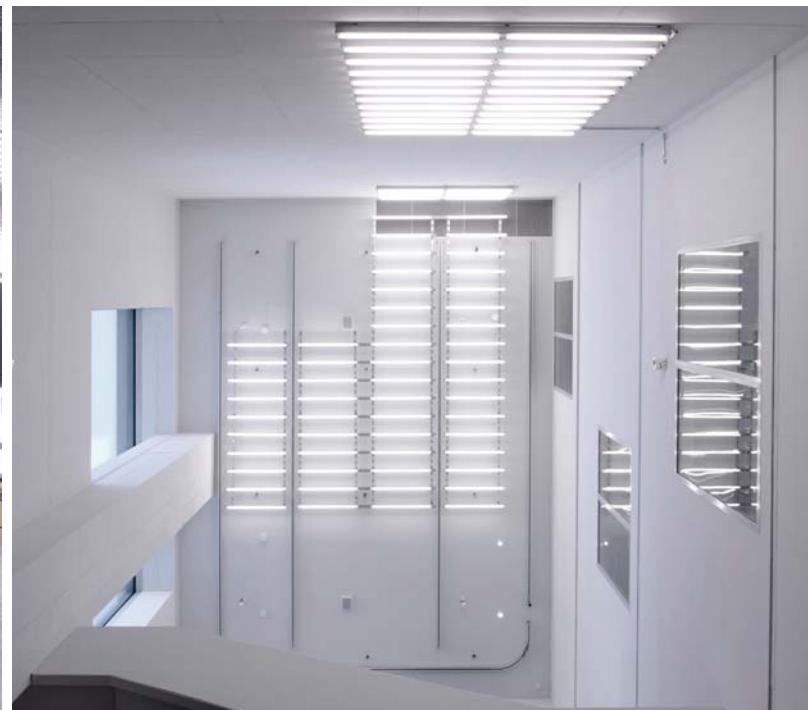
The lent slogan "*Ad Fontes*" ("toward the sources/origins") serves as headline of the project in several ways: it invites to start over and to focus on the essentials. It refers clearly to the spiritual fund of humanism and its implicit vision of a return to the (classic) principles. And it describes the very character of the pavilion: it is fundamental, even if the term "sources" has a totally different meaning here.



Maslow's hierarchy of needs 2014 (source: internet)



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE



Toni Areal, 2014

Artistic light installation for Zurich University of Applied Science & Zurich University of the Arts

Location: Förribucksstrasse 109, Zurich, Switzerland

Architects: EM2N (Building Transformation), Zurich, Switzerland

Client: Allreal Toni AG

Dimensions: approx. 7,900 m²

Materials: approx. 2,700 Fluorescent Tubes, Wiring, Light Control System

Project Status: Completed

Realization Budget: 700,000,- CHF (approx. 720,000 US\$)

Performances: Concept, Design, Planning

realities:united was commissioned to develop concept and design for an artistic light installation, at the Toni Areal in Zurich, Switzerland.

Due to the spatial and organisational merging of the two Zurich universities, ZHAW and ZhdK, a new "super institution" in a "mega building" emerges, planned by the Swiss architects office EM2N.

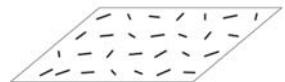
The two main public connection spaces are recognizably influenced by different interests; a state characterized by inhomogeneity, opposition and confrontation. These are not the typical neutral connection halls optimized for smooth and fluent transportation.

Likewise, the light arrangement doesn't aim to achieve an even intensity throughout the spaces. Instead the normally uniform light grid, has been concentrated to certain parts of the rooms. A gradient illumination, from bright to dark, emerges. Further the inhomogeneity stays annoyingly indifferent; the light doesn't follow any technical arrangement, doesn't conglomerate into a light sculpture, nor does the composition serve an obvious dramaturgical or architectonical staging.

uniform grid



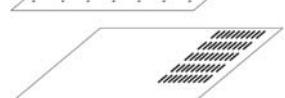
irregular distribution



light art object within grid



concept realities:united



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE



Phantásien, 2015
Public art installation

Location: Mill Woods Library, Edmonton, Canada
Architects: Dub Architects, Canada
Client: Edmonton Arts Council, Canada
Dimensions: 4.7m x 4.2m x 2.8m (Study Room) 4.1m x 2.5m (WxH/Mirror)
Materials: Low Iron Glass Mirrors with Colour PVB Inlayers, LED Backlit Translucent Ceiling, Vinyl Floor Tiles, Low Iron Glass Walls, Customized Furniture
Project Status: Completed
Realization Budget: 85.000,- EUR (approx. 95.000 US\$)
Performances: Artistic Concept, Interior Design, Planning, Production

The public art installation *Phantásien*, for a study room in the Mill Woods Library, is loosely inspired by the novel "The Neverending Story" (1979) by Michael Ende.

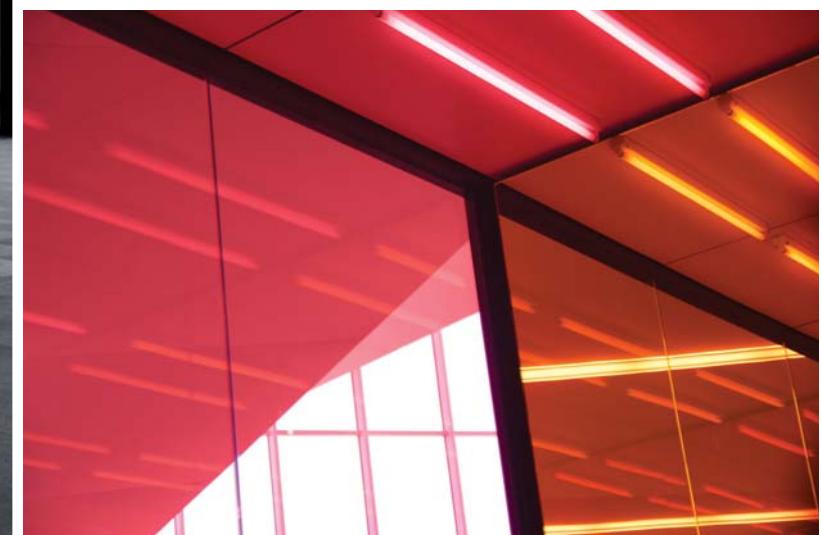
This remarkable epic is dealing with the idea of healing the world through imagination, while stagnation and satiety result in expiration. At the centre of the novel is reading itself, or more precisely the relationship between the reader and media. While reading, a little boy, slowly enters the imaginary space of the story, which in German is called *Phantásien*. All while the real space surrounding the boy gradually dissolves.

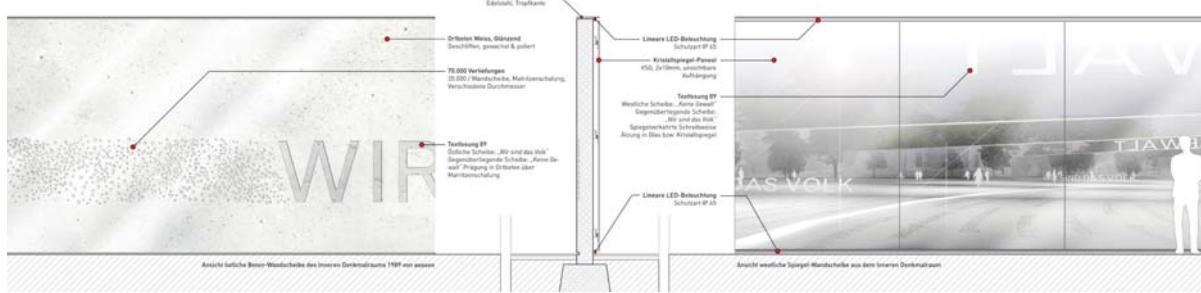
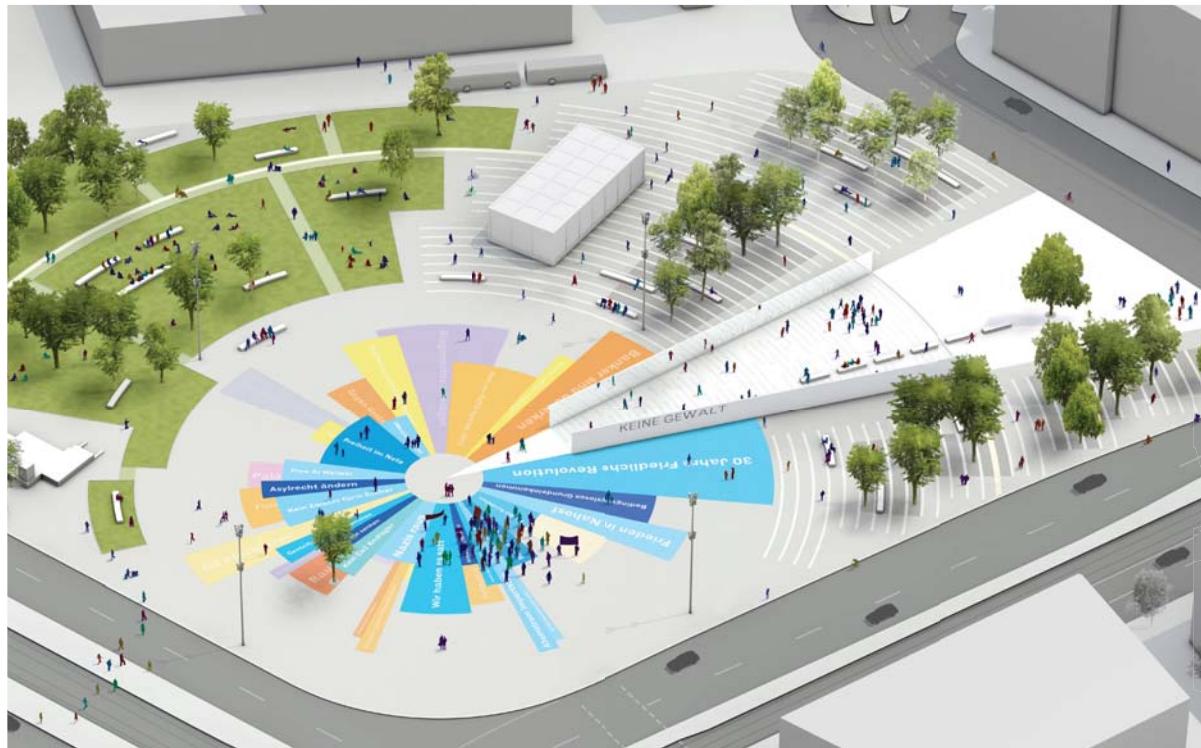
The proposed art installation *Phantásien* is also centred around the relationship between book and reader. Transforming a study room - a secluded space within the library. This is a place for the contention between the reader and the medium, as understanding and reflection constitute the base for the reader's personal adoption of the reading matter.

And even though the study room is rather small from the outside it appears surprisingly large once you have entered it. Here is an endless amount of space for the reader's imagination and interpretation.

While Michael Ende is using two different text colours in his book in order to distinguish reality and fiction, the installation *Phantásien* makes use of the principle of colouring in a different sense: The two solid walls of the study room are each covered by one big glass mirror, each one homogeneously tinted in one colour.

Through the use of these two colours the perception of the well-known "infinity effect" of a double-mirror installation is slightly altered: There are no objective reflections, but each image reproduction is coined by the individual character of the coloured mirror(s). Back and forth, these colours are superimposed again further and lead to a gradual disappearance of the original image within the depth of the reflection space.





Foundation for the Future, 2013 Monument to Freedom and Unity, Leipzig, Germany International competition, 2nd Prize

Location: Wilhelm Leuschner Platz, Leipzig, Germany

Client: City of Leipzig

Consultants: Man Made Land, Berlin (Landscape Architects); Schlaich Bergermann and Partner (Structural Engineers); Susanne Jaschko, Aachen

Dimensions: approx 16,500m²

Materials: Concrete, High-grade Steel, Glas Mirrors, Natural Stone, Asphalt, Road Paint, Wood, LEDs, Waterbound Floor, Lawn, Trees etc

Project Status: Unrealized

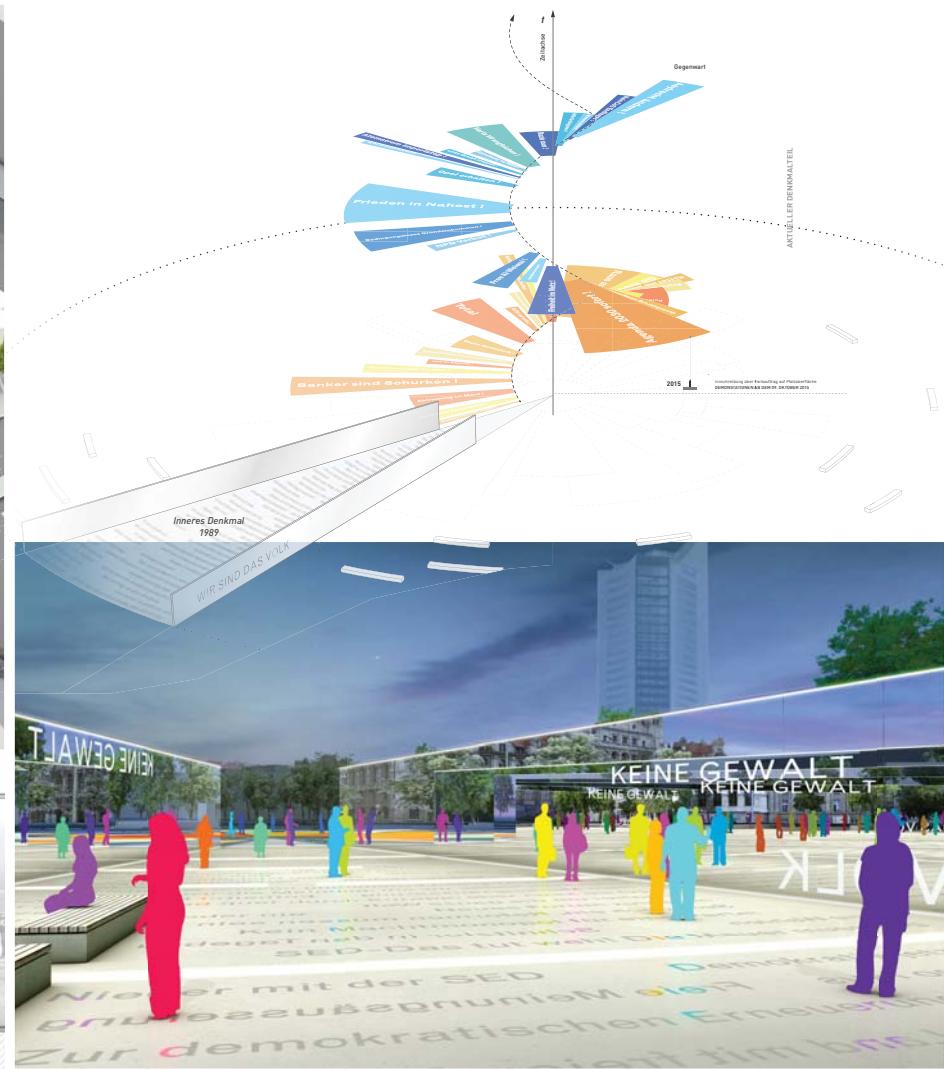
Realization Budget: 4.700.000,- EUR (approx. 5.300.000 US\$)

Performances: Artistic & Technical Concept, Plaza Design, Software Concept

The award winning competition entry *Foundation for the Future* for the "Monument to Freedom and Unity" in Leipzig, Germany, proposes two major interventions for the square "Wilhelm Leuschner Platz" located in the city centre.

For one thing, the "Inner Memorial", a place of remembrance for the events in 1989. An open space, framed by two mirror walls, 3.6m high and 55m long, facing each other at a 20° angle. By repeated reflections the illusion of a curved space arises, expanding into a theoretical circle with a diameter of 140m. Visitors and slogans from 1989 are blended and layered in this "infinite space".

The second intervention is a prominent dynamic chart manifested on the plaza ground - a noticeable sign in the urban space. Here, a continuously active support process for political and social engagement takes place, turning the plaza into a platform for present political demonstrations. Because of the sequentially renewed ground graphic, political actions are not only served, but a visible archive of claims and concerns gradually develops as these are constituted directly onto the ground.



The political campaigns are also digitally archived and accessible online. Through the painting process an approximately 4,000 square meter sized circular graphic emerges, repainted step by step, revealing an entirely new composition every year. At each point in time, the chart comprises an objective and immediately readable collection of the relevant political claims and social concerns of today. Almost like an info-graphic of contemporary political culture, standing in direct relation to the historical events of 1989 - the year of the Peaceful Revolution.

This new configuration of the memorial formal correspondingly turns the traditional financing model upside down. Instead of using the whole budget for a built structure, whose preservation leads to further cost, the resources are permanently obtained through a charitable foundation.

Its financial surplus ensures the constant renewal of the memorial. The foundation as supervisory facility also has the mission to adjust the memorial process to future requirements.





Anhöhe, 2016
Temporary installation for the FOREIGN AFFAIRS theater festival
at Haus der Berliner Festspiele

Location: Haus der Berliner Festspiele, Berlin, Germany
Client: Berliner Festspiele
Dimensions: 20m x 8m x 3m
Materials: Scaffolding, Wood
Project Status: Completed
Realization Budget: N.a.
Performances: Artistic Concept, Planning, Production

While actors may be accustomed to performing the same piece over and over again, this is seldom the case for architects and visual artists. With their designs and installations for the Foreign Affairs festival over the years, realities:united have thus continued to approach the architecture of the Festspielhaus anew. Each time, they have focused on a different area or aspect of the ensemble designed by Fritz Bornemann in the early 1960s: façade, foyer, main auditorium, and even the adjoining parking area.

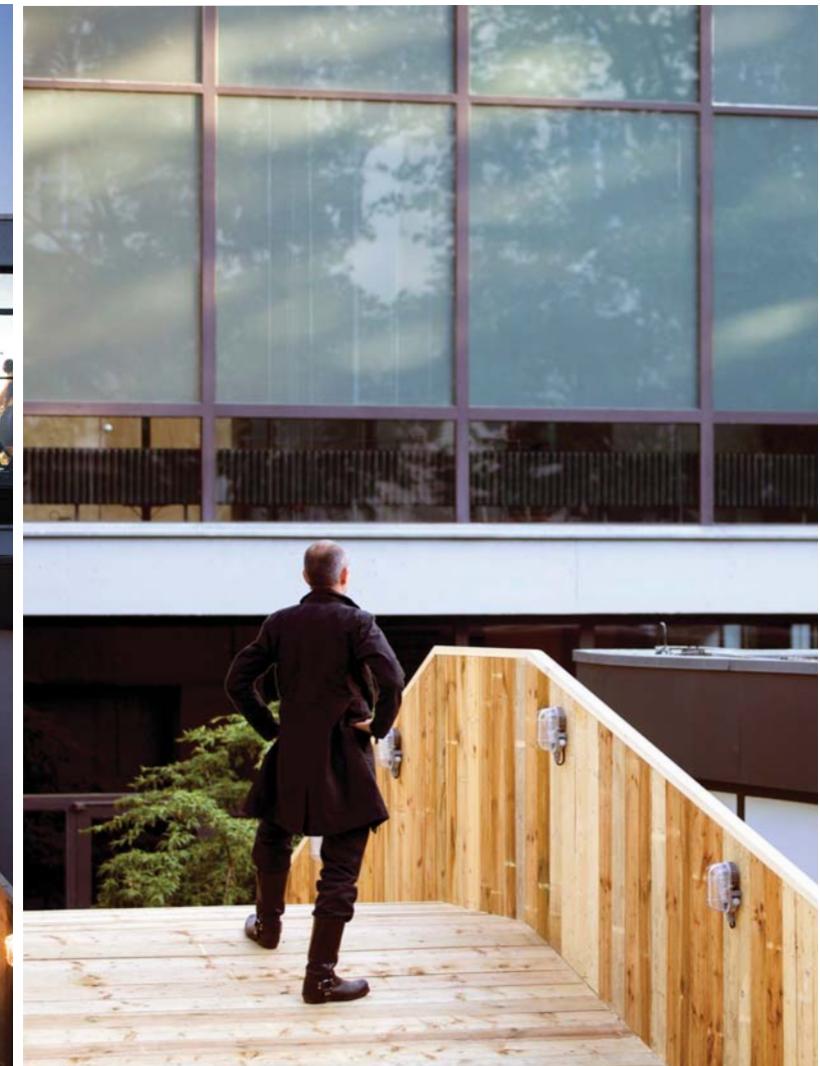
The installation, called *Anhöhe* (English: "Elevation"), can be understood as the culmination of the group's previous interventions. The hill-like installation in front of the main entrance evokes techniques from Romantic-era landscape painting, in which the main landscape is foregrounded by a small elevation, where figures can be seen from behind, observing the view. In painting, a sense of the sublime is evoked by the simultaneity of both the real viewer and the depicted viewer observing the landscape.

To be on the safe side, the composition also clarifies its central subject and what we are supposed to look at. In this case, what the eye should focus on is the building itself.

The ascending ramp at the main entrance evokes the representative gesture of a central, freestanding staircase leading up to the building. But in fact, it is an obstacle, which, like a wall, obstructs the modern building that opens onto the outside space.

Access to the building becomes a sequence of approach, ascent, and pause at the summit, followed by descent to actual entry. The artificial hill raises the observation point higher than the roof of the lateral box office annex, which now recedes visually. It guides viewers to the central axis of the main façade, thereby emphasizing its presence and lending it the appearance of being detached. Additionally heightening its physical presence is the abstracting effect of frosted glass windows, which have been covered with an opaque film for an installation by William Kentridge.

The installation *Anhöhe* is the most "distanced" work of the series, as it does not touch the building. Installations in previous years have included the spatial penetration, fragmentation, dissolution, or extension of the building, as "adjustments" to the building architecture that architect Bornemann intended to be modern and transparently inviting to the city.



Today, his approach might be considered outdated: the building's openness, with its possibility for people and artistic actions to appropriate its flowing spaces, is increasingly perceived as a liability with the potential to disturb the public peace.



Essential Tree 2, 2017
Public art installation, Edmonton

Location: Rogers Place Arena, NW Plaza, Edmonton, Alberta, Canada
Client: Edmonton Arts Council
Dimensions: approx. 15m x 12m
Materials: Steel, Paint
Project Status: Completed
Realization Budget: 500.000 CAD (approx. 370.000 US\$)
Performances: Artistic Concept, Design, Planning

The installation is the abstraction of a tree as commonly used in architecture and urban planning models, yet enlarged to original (fully grown tree) scale. It is an object which, through simple means, represents the impression of a tree, but at the same time appears to be at "wrong scale". This primitive three-dimensional sketch is a built contradiction. The significant size of the abstract object reveals: something has been artificially simplified. What still works as abstraction in small scale, for example the edged shape as representation of the complex amorphous treetop, in this case becomes subject and statement.

Usually the contemplator automatically expands the impression of the abstraction to the much more complex imagination of the real object. Here it is the abstraction of the model itself, which becomes the principal topic. This contains an indication to the neighbouring Rogers Place complex: this giant abstract volume also widely disclaims conventional identification of scale and utilisation. And in particular: what happens inside is being subdued to a conscious and deliberate simplification and thus resembles the nature of the model in many respects. For model and game have much in common: the objective and commonly recognized "senselessness" of game (for example the fight for a piece of rubber to cross a certain mark on the floor) does

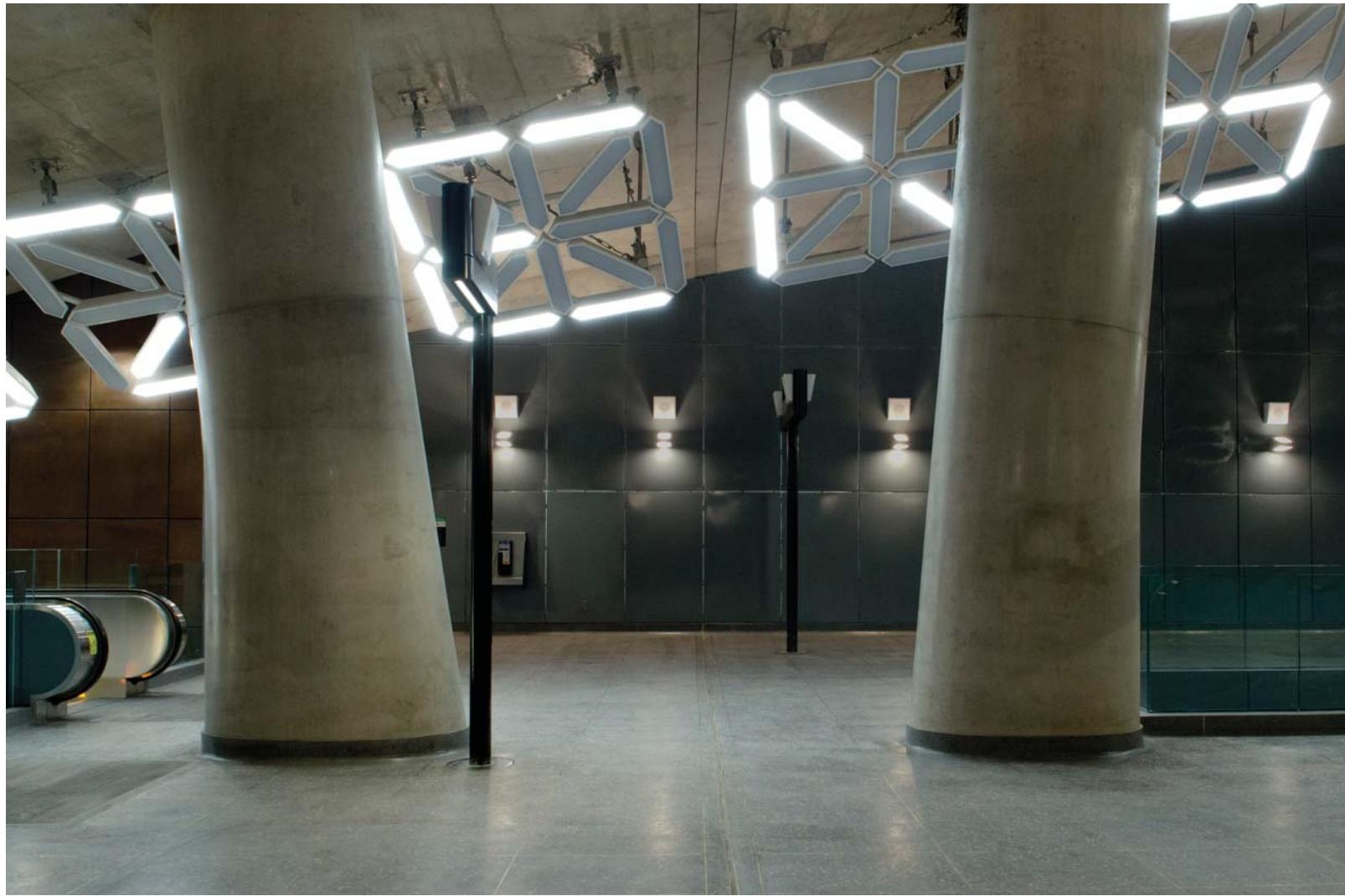
face an especially high level of unconditional commitment of the supporters or even the entire society. Sport is a simplified model of society and relies primarily on its course being significantly more regulated, simpler and clearer than complex reality. And nowhere does the interpretation of such simple rules find a more relentless and dogmatic environment than in game and sports. All other human, political, cultural and even legal circumstances bear a wide scope of considerations, which, in favour of a model-like clarity of the occurrence, are deliberately avoided in sport.

The tree as subject of this process of translation into a model, is also a reaction to the architectural aspiration of the building. Strikingly, the building complex illustrates the principles of dynamics, growth and expansion. Its overwhelming strength seemingly liquefies the formal rules and boundaries which apply to all surrounding buildings and the city in general. Part of the viscous mass has already started to move and it effortlessly crosses 104 Ave to start a branch on its southern side. The strength of this building complex is effective beyond its boundaries, and it is this tree, being closest to the building, which is transformed first - just like an extremely cold or blazing item can freeze over or set on fire its immediate environment.



The tree is not only by chance close to the but was also explicitly chosen as the symbol par excellence of "the natural" which is broadly understood as counter-principle to man-made urban environment. The transformation of a tree into an artificial abstract shape resembles a contemporary and radicalised variation on European baroque: in this era, plants and gardens were considered as continuation of architecture and were organised in artificial geometric order; trees were skilfully trimmed to images of primary geometric shapes. Nowadays, this idea of an anthropogenic conception of order which "overrides" nature seems unpleasant to us, as it dawns on us, that even with our greatest efforts we will never come anywhere close to the thoughtful complexity of life as it manifests itself in every common tree.

Hence, this artificial tree is ultimately meant as a reminder to ourselves to carefully and critically attend to the impact of mankind – our impact – on nature, to keep the balance, so that the magnificent does not turn megalomaniac.



LightSpell, 2017

Interactive art and lighting installation for a Toronto subway station

Location: Pioneer Village Subway Station, Toronto, Canada

Architects: Will Alsop Architects, London, UK

Dimensions: approx. 130m length

Materials: LED Chandeliers, Wiring, Light Control System, Computer System, Custom Software

Project Status: Completed (currently not in operation)

Realization Budget: approx. 500.000 CAD (approx. 370.000 US\$)

Performances: Artistic & Technical Concept, Design, Planning

The art and light installation *LightSpell* is an oversized text display, ca. 130m long, that hangs from the ceiling of the "Pioneer Village" subway station in Toronto. The display consists of an undulating band of 40 special chandeliers.

Each individual lamp forms a "16-segment display" typical of the early phase of digitalization in the 20th century, on which letters, special characters, and numerals can be shown.

Placed at intervals along the entire length of the station, several keyboard terminals are available to passengers waiting for their trains. There they can easily enter symbols and words that appear directly in the light installation as a repeating chain of characters. No matter what sequence of characters is displayed, the system regulates their illuminating power to keep the brightness on the station platform constant.

LightSpell is an experiment on open-ended communication and interaction in the public space. A central theme is the definition of "public space" in a situation in which new digital means of expression increasingly and significantly extend the range of communication of each individual within the public space. The system does not exercise any form of technical censorship of the input contents. An input terminal allows every conceivable combination

of letters or characters, with the resulting "text" appearing directly above the heads of everyone waiting on the train platform. The people on the platform are the only influencing factor and the only public corrective.

Some messages will remain for only a few seconds, others will remain visible for hours and days. Every passerby has the opportunity to overwrite, correct, ignore, or answer the existing message. But however different the messages may be, there is one simple and unchanging constant: whether witty, intelligent, or meaningful, whether senseless, stupid, or insulting, whether read and understood by all or overlooked by all – each utterance inevitably becomes the platform's illumination and in this way serves to fulfill a simple, basic need.

LightSpell also permits flexibility between the roles of sender and recipient. The installation thereby transforms the classic public space of the subway stations into a site of reflection of the increasingly digital public sphere. This sphere obeys different laws and it changes ever more spaces and aspects of the present, opens up new spaces of action for the individual, and at the same time permits ever fewer possibilities of escape, because it is becoming a basic component of even the simplest and most everyday things of life.



Surprising to the artists, the installation, whose concept realities:united had developed and had received approval from the Toronto Transit Commission (TTC) in 2009, was not activated at the opening of the stations in December 2017. The TTC justified its decision to censor the artwork on the grounds that "inappropriate" text content could offend other passengers or may result in unacceptable interference with general safety.



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE



BIG Vortex, 2017

Award winning public art installation proposal for Copenhagen

Location: Amagerforbrænding Waste-to-Energy Plant, Copenhagen, Denmark

Architects: Bjarke Ingels Group (BIG), Copenhagen, Denmark

Client: Bjarke Ingels Group (BIG), Amager Resource Center

Dimensions: approx. 30m x 6m (WxH/Ring)

Materials: Flue Gas, Modified Exhaust System

Project Status: In Planning

Realization Budget: n.a.

Performances: Artistic & Technical Concept, Design, Planning

Video: <http://vimeo.com/40229132>



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE

The new Amagerforbrænding Waste-to-Energy plant is an innovative model in the fields of waste management and energy production. It will be complete in 2016, just three kilometres from downtown Copenhagen. It will be the single largest facility of its kind in Denmark, costing 500 million Euros.

realities:united have designed an elegant exhaust system for the plant. It transforms the smoke emitted into a symbol of the path our waste follows into the atmosphere. Instead of a steady stream of flue gas, the plant emits one giant smoke ring for each half ton of CO₂ it produces. The rings are 30m in diameter, and 6m high. As they slowly rise and cool, the water within the gas clouds condenses to revealing each ring shortly after it floats away from the plant.

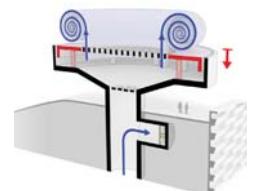
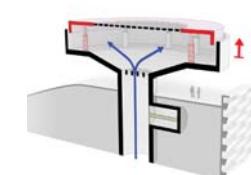
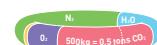
The smoke clouds reinstate an archaic communication method to transport a simple fact. Exactly 500kg of carbon dioxide have just been released into the atmosphere. On a clear day, this message will be broadcast throughout the city. This solemn procession gives the abstract emissions debate shape and scale; people can see it, and count it.

Still it is not a simple message. On the contrary. Denmark is the world leader in waste-to-energy conversion. The new state-of the art Amagerforbrænding plant will reduce environmental impact to a minimum. The technology it uses is widely regarded as the best solution available. It still might not be enough. Sophisticated methods alone will not halt climate change. At the end of the day, only the absolute emissions matter. Even with tremendous machines that clean up behind us, we can no longer ignore the limits of the planet we live on; Only our ability to adapt our lives to these limits will count.



"Combining clarity with poetry, BIG Vortex exemplifies a whole new direction for discussing eco-political matters that sometimes seem overwhelming to the citizen looking for answers. Exemplifying the fact that we have no magical solution to many ecological problems yet is a good place to start."

Michael Elmgreen & Ingar Dragset, Artists





Architecture of Autonomy, 2017
Installation for Gwangju Biennale, Folly III

Location: May 18 Democracy Square, Gwangju, Korea
Architects: Moon Hoon Architects
Client: Gwangju Biennale
Dimensions: approx. 5m x 23m
Project Status: Completed
Realization Budget: N.a.
Performances: Artistic Concept, Design, Planning

The installation *Architecture of Autonomy* is located on the roof of a public building adjacent to May 18 Democracy Square in Gwangju, South Korea. It is closely connected with the installation *View Folly* by Seoul based architect Moon Hoon. The installation is well visible from afar and thus serves as a bait to climb the roof and to discover *View Folly* with its hidden viewing platform behind it. *Architecture of Autonomy* consists of 33 individually and manually rotatable triangular columns. The 3 surfaces of each column are painted in 3 different colours. Each side or elevation of the installation is additionally equipped with large letters stating the slogan "CHANGE".

The installation forms space by defining a front and a rear side, or, in other words, an external surface and the resulting usable interior space behind it. The relationship between these two main aspects of architecture, surface and space, is the theme of the *Architecture of Autonomy* project. The installation, as exterior shell, externally objectifies the interior space and gives it a visual identity or "address", recognizable from afar. Vice versa, the initially invisible "actual" space of *View Folly* on the adjoining rear roof surface supplements the visitors' ultimately rather simple experience of the



external "interactive" installation. This shift in the reference level between *Architecture of Autonomy* as "superficial attraction" and *View Folly* as "usable level" behind it is only one aspect of the experience of the overall ensemble. On a closer look, the installation, which from afar appears to be the goal of the climb, transforms into a kind of interim component or passageway to another, initially unknown experience behind it.

The term "change", visible from afar, is a central metaphor of our time. Simultaneously, its meaning is completely indeterminate or self-contradictory. In 2008, it became the trademark slogan of Barack Obama's presidential campaign, but it is also clearly inscribed in his successor's presidency as a kind of negative afterimage. Today, the term is at the center of attention between the political forces of emancipation and democratization, on the one hand, and those of old and new authoritarianism, on the other. But precisely the idea of "change" divides society and creates differences: there are those who consider change vitally important and those whom it frightens. For example, "change" is supposed to lead to equality and the elimination of differences between people – or it can be understood as a

return to structures, classes, castes, and nations that make it possible to avoid contact with what is different. The installation's effect as a typically authoritarian propaganda instrument whose message is broadcast to the city from a secure height is paired with its "interactivity" and expression of the individual person's will to design. Together, they are set in motion as soon as one contemplates it more intensely. As far as we can see today, involving every individual in purported decision-making processes is part of the strategies of societal control. "Change" as a call to the individual to become (himself or herself, and autonomously) active does not essentially differ from the call to collaborate or even to be subjugated. Ultimately, it all depends on whether the possibilities to change also include changing the system of action.

The installation similarly combines the summons character of the slogan "change" with an opportunity to interact, that in return makes the display wall itself the object of change; it can actually be configured to an unimaginable number of different colour patterns. However, the original slogan text is preserved in every colour variant.



Flussbad, 2022 Award winning urban renewal and swimming-pool precinct

Location: Kupfergraben, Berlin, Germany

Consultants: Anna Lundquist & Christian Bohne/ Man Made Land, Berlin, Germany (Landscape Design); Heiko Sieker/ Ingenieurgesellschaft Prof. Dr. Sieker, Hoppegarten, Germany (Hydraulic Engineering)

Dimensions: River stretch of 1,8 km

Project Status: In Planning

Realization Budget: N.a.

Performances: Artistic Concept, Design, Planning

Video: <http://youtu.be/N4FwAq38pq4>



REALITIES:UNITED
STUDIO FOR ART AND ARCHITECTURE
WWW.REALITIES-UNITED.DE

The goal of the Flussbad project is the permanent transformation of a 1,8-km stretch of river in Berlin's historic center that has gone unused for more than 100 years.

The lower section of the course of the river, currently channeled as a canal, will be made into a space accessible to the public via two broad shoreline stairways at the Lustgarten and the Schlossplatz. The design alterations in this sensitive city-planning area, part of which belongs to the "Museum Island", a UNESCO world cultural heritage site, are restricted to a minimum. In the former canal in the middle of these historical environs, a new site will be created for sitting, watching, and relaxing - and for swimming.

The stairways provide access to a natural swimming pool 745 meters long, for the water flowing through this arm of the river has bathing water quality. A functional changing facility with lockers serving the practical needs of swimmers is invisibly integrated in the unused lower storey of the former Kaiser Monument.

The filtered water comes from the upper reaches of this section of the river, which lies about 1.2 meters higher than the pool. There, on a stretch 390 meters long, a 7,200m² constructed wetland is inserted into the canal profile to purify the running water in a natural way. The 640-meter uppermost section of the river that continues from there will be renaturalized. To this end, the northern shore wall will be completely removed and the course of the river gently widened into the grounds of the Fischerinsel. As an auxiliary purpose, this section serves as an inner city green area and preliminary water purifier. The actual main purpose of this side arm of the river is as a wildlife refuge, to support the resettling of riparian flora and fauna in the channeled main arm of the Spree River in Berlin's urban area.

Flussbad is the winner of the 2012 Global Holcim Award for sustainable construction in Bronze, and the 2011 European Holcim Award for sustainable construction in Gold.

The project is currently receiving substantial public funding (4M EUR from the national urban development programme funds) and political support by the Berlin City Parliament to be further developed and to prepare future implementation to the site.

