

# *YLEM*

YLEM: Artists Using Science and Technology is an international organization of artists, scientists, authors, curators, educators and art enthusiasts who explore the intersection of the arts and sciences.

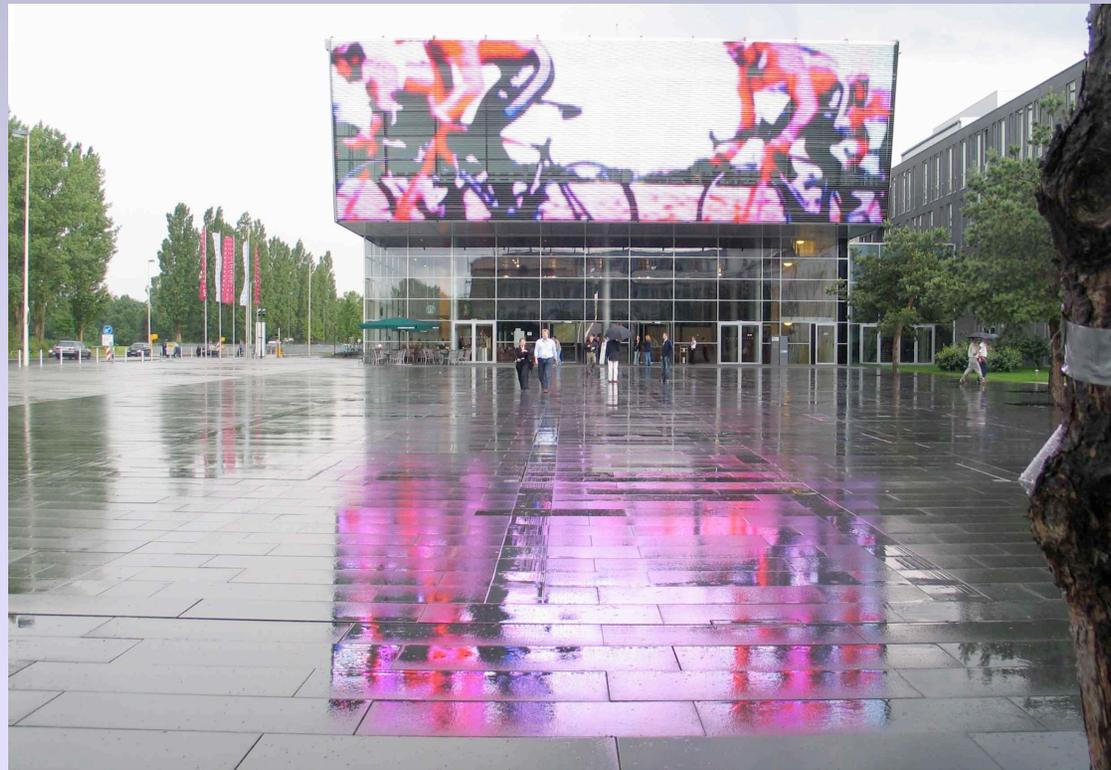


# *YLEM*

YLEM was founded by Trudy Myrrh Reagan in 1981 in the San Francisco Bay Area. YLEM members strive to bring the humanizing and unifying powers of art to the science and technology that are driving forces in contemporary culture. Our members work in new art media such as computers, kinetic sculpture, interactive multimedia, holograms, robotics, 3-d media, film, video, web art and more.

**[www.ylem.org](http://www.ylem.org)**

**MEDIA FACADES:  
THE FOURTH DIMENSION OF ARCHITECTURE**  
*a study in the evolution of digital displays converging with  
architectural cladding design*  
by  
Louis M. Brill



# INTRODUCTION

*"Up to now architecture has been about fitting buildings into three-dimensional space. Now using video screens or illuminated cladding to completely cover a building's surface changes the equation of how a building occupies that space.*

*The convergence of a digital display on a building surface now places it in a fourth dimension where its exterior lighting, pictorial, and iconic imagery become a critical representational feature of how the building presents itself."*

Darryl Yamamoto, AIA, of AVR P, Los Angeles  
(Austin Veurn Robbins Partners)

Grand Indonesia Tower  
Jakarta, 2008

Designed by Darryl Yamamoto  
and Andrian Velcescu



## OH SAY, CAN YOU SEE....

We live in a visual society where the video screen has become the predominant fixture of how we communicate. It dominates the home with television and computer displays. It follows us around with cell phone call, text messages and pictures.

It was just a matter of time before media facades appeared...



## WHAT IS GOING ON?

### Introducing The Media Facade

The media facade involves transforming a building from a "physical structure," of a shelter to a 'public message center' where the building's exterior wall acts as a community bulletin board transmitting text and graphic messages into its surrounding public space.



**Lehman Brothers Building, Times Square**

## WHAT DOES THIS MEAN?

Media facades are a convergence between architecture, media, advertising and public art all blended together that redefines a building's relationship to public space.

The Environmental Impact Report is now matched with a Cultural Impact Report as to how a media facade building visually and culturally affects its immediate public space.



# EXTERIOR BUILDING DECOR HAS A LONG TRADITION:

Gargoyles



Stone work



Murals



**APPRECIATING THE MEDIA FACADE**  
**IT'S ALL ABOUT VISUAL LITERACT**

*"The media façade is becoming an architectural icon of the digital age where a building's imagery becomes a visual manipulation of its identity."*

Tom Vanderbilt, Circuit City

S  
P  
O  
T  
S

**Berlin, 2005**  
**Media façade by:**  
**realities:united**



## **MEDIA FACADES: WHAT ARE THEY?**

A media facade is an LED video screen architectural element that completely covers the front of a building. In some cases a media facade is a "mesh curtain" that covers the front of a building. In other cases it is a design element that is incorporated within the cladding of the building.

The end result is the same, the building inherits a video skin which becomes the "voice" of the building's corporate identity.

*media facades = video cladding*

## **MEDIA FACADES: EVOLVING AS AN ARCHITECTURAL ELEMENT**

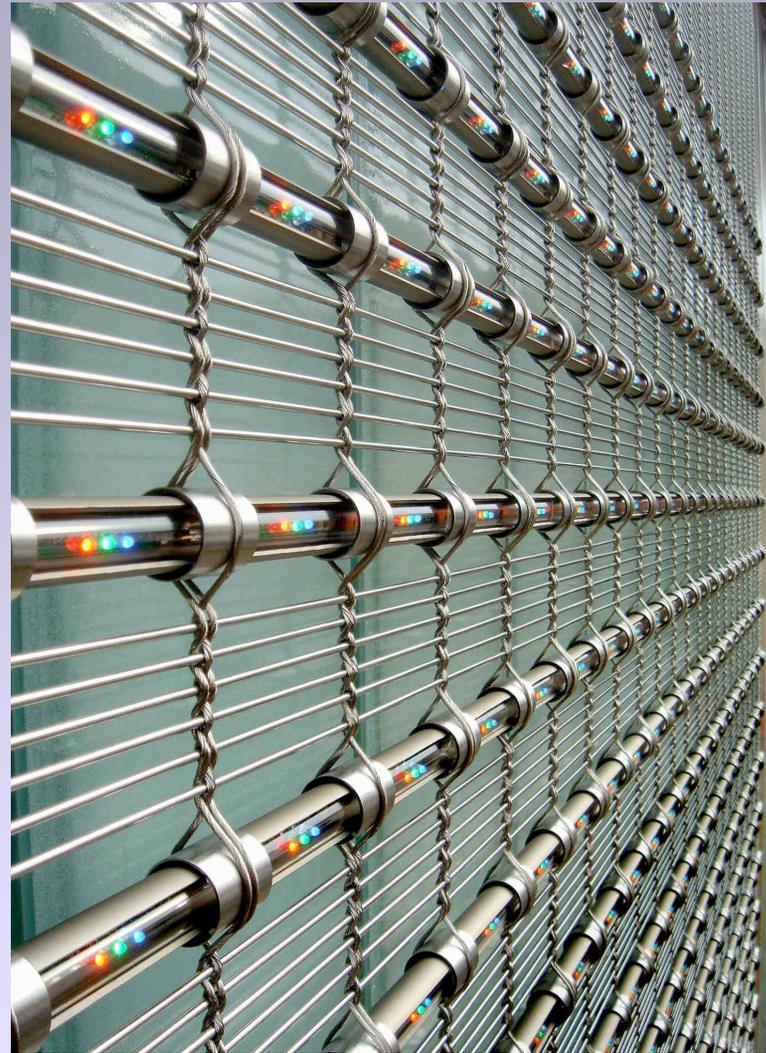
### The challenge:

Design the LED video screen in a way that simultaneously allows the media facade to act as a video display in presenting graphic and video images but does so without blocking ambient daylight from the building's windows and glass walls.

## **MEDIA FACADES: EVOLVING AS AN ARCHITECTURAL ELEMENT**

### The result:

A media facade transforms a building cladding into a series of LED video matrixes that form linear arrays which are inserted horizontally across the front of the building. The LED matrixes are installed at specific distances separating each linear array to allow daylight to pass through the windows into the interior office space.



**Mediamesh, designed by ag4 and GKD**

# **IN THE DIGITAL AGE, DECOR COMES FULL CIRCLE:**

## THE MEDIA FAÇADE

A media facade video statement works equally well on a small building as it would on a 20, 30 or 50-story building.



**SPOTS, Berlin 2005 media façade by realities:united**

## SO IT BEGINS

Video covered buildings were first foretold in *Blade Runner*, Ridley Scott's 1982 film on androids (artificial humans) and their place in society.

As the movie unfolded across its futuristic city-state, film viewers were able to glimpse several examples of video screens attached to buildings and integrated within the city's skyline.



**Blade Runner, 1982**

## SO IT BEGINS

The first real world instance of video cladding was introduced in Times Square in 1996 with the NASDAQ Marketsite Building which was covered with a ten-story video wall.



## **SPEAKING OF TIMES SQUARE**

Videoizing a building's cladding is a phenomena that began in Times Square in the late 1990s. There are at least a half dozen skyscrapers that represent the beginning development of media facades as an architectural design concept.



## **POST TIMES SQUARE**

What happened is that media facades migrated out of Times Square and began appearing in Asia, in Tokyo, Shanghai and Hong Kong. Media facades have appeared throughout Europe including such major urban centers as Berlin, Geneva, Switzerland and Graz, Austria.



**BRUSSELS, BELGIUM, 2000**

## **WHY DO THIS?**

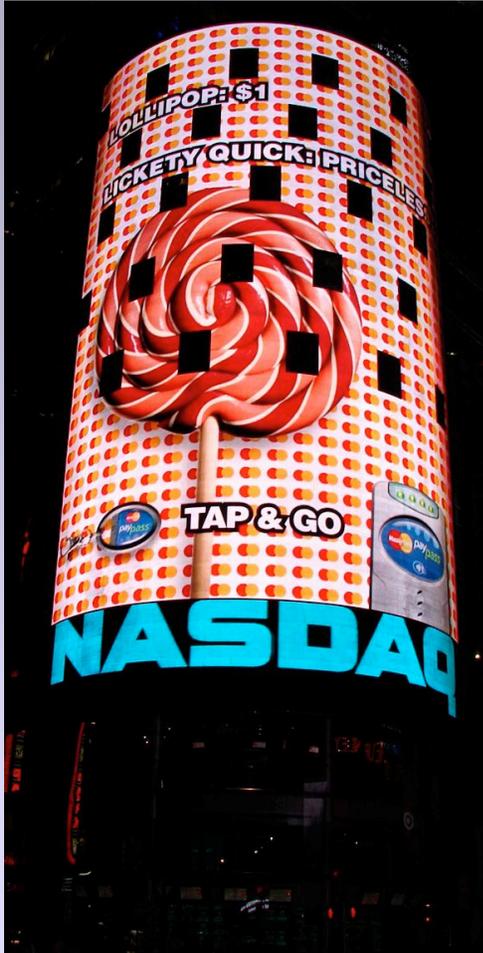
- Gives a visceral feeling to the building's physical presence.
- Redefines the public space around the building with a specialized communication connection to its immediate community.
- Creates an opportunity for local civic-minded groups to participate in placing appropriate message content in the public space.
- Creates a more kinetic look to the surrounding skyline.
- Enhances the neighborhood as the building becomes a tourist destination.
- Creates an additional revenue opportunity to building owners.

## **MEDIA FACADES IN THE PUBLIC SPHERE:**

In the simplest form, a media facade is covering a building with a gigantic television screen. How it is used depends on the building owners intentions of how they want to define the building's visual presence:

- **Branding**
  - Visual express its corporate identity
- **Advertising**
  - Co-operative advertising from various building tenants, showing off their products and services.
- **Art & Culture**
  - Graphic imagery is more abstract, displaying a cultural presence of building's relationship to the world around it.
- **Tourist Destination**
  - Building's visual presence is so unique it becomes an attraction and a tourist magnet.

## MEDIA FACADES IN THE PUBLIC SPHERE:



NASDAQ  
Times Square



UNIQA TOWER  
Vienna



CHANEL  
Ginza

## **MEDIA FACADE IS A TEAM OPERATION: WHO ARE THE PLAYERS?**

- **BULDING OWNER**  
Commissions the building design to be covered with a media facade.
- **ARCHITECT**  
Incorporates some form of video covering across the building front wall.
- **MEDIA FACADE PROVIDER**  
An LED video manufacturer who provides a LED video matrix that covers the building wall and also allows for exterior light to pass through its front windows.
- **CONTENT CREATORS**  
Provides content source material from branding to public art that is displayed on building front.
- **CONTENT PROVIDER**  
Coordinates the visual content that is created and displayed upon the front of the building.

## EXAMPLES OF MEDIA FACADES

*"A media facade wall brings a public service component to a building with not only advertising and branding, but also art and culture. At some point the use of the screens becomes a collaboration between the building's tenants and the surrounding community to present a 'world view' of what they're about to."*

Christoph Kronhagel, ag4 (Cologne, Germany)

ag4 co-founder and co-inventor of ag4's LED video wall



media facades work in all kinds of institutional settings:

corporate

MALLS

sport stadiums

museums

art galleries



**Khalifa Tower, Doha, Qatar**

# EXAMPLES OF MEDIA FACADES



# SPINNACKER

Zurich, Switzerland



media façade by ag4 / architect design by Helmut Jahn

# SPINNACKER

Zurich, Switzerland

This media facade mimics a sail, and not only transmits images on its facade screen, but is also controlled by an anemometer (wind measuring instrument).

As the direction of the wind is measured, it causes the media facade screen to virtually react and billow out as if it was inflated by the passing breezes.



media façade by ag4  
architect design by Helmut Jahn

## **O2 WORLD, SPORTS-ENTERTAINMENT ARENA (Berlin) 2008**

O2 will be a world-class multi-event entertainment arena (holding up to 17,000 spectators) and will provide programs ranging from sports, music and live shows.



**media facade designer TBA**

## **O2 WORLD, SPORTS-ENTERTAINMENT ARENA (Berlin) 2008**

O2 World will be located in the urban area of Osbahnhof, Germany. The building design will present a curved glass facade wall (105 degrees) with a height of 15 meters and a length of 120 meters for a total of 1800 square meters of a media facade display.

Given that O2 World is a multi-purpose entertainment arena, it is likely that all content will be event-driven preview promotions and trailers of upcoming sporting events and music concerts that will be appearing at the arena.

**SORENO, A CORPORATE CAMPUS**  
(Geneva, Switzerland), "LIFE" (2006)

Serono is one of the world's leading pharmaceutical companies in the area of biotechnology and is in the process of expanding its headquarters in Geneva with a media facade which is both a display and a sculpture.



**Media facade design and content is provided by  
ag4 (Cologne, Germany) architect: Helmut Jahn**

**SORENO, A CORPORATE CAMPUS**  
(Geneva, Switzerland), **"LIFE" (2006)**

The Serono media facade is divided into layers which include the LED screens, and a series of mirrors used to create the impression of a complex space that extends into the infinite. The media facade offers a metaphorical video presentation focusing on the cycle of life and presents images of Serono as a leading biotechnology company.



**Media facade design and content is provided by  
ag4 (Cologne, Germany)**

## **T-MOBILE, CORPORATE HEADQUARTERS (Berlin, 2003)**

T-Mobile corporate headquarters building has its entire front upper half of a 3-story building covered in a full color, LED video-based media facade. A series of horizontal LED video arrays is mounted across the building facade. The building's screen size is 10 meters high by 30 meters wide.



**media facade design and T-mobile content  
provided by ag4 (Cologne, Germany)**

## **T-MOBILE, CORPORATE HEADQUARTERS (Berlin, 2003)**

The media façade serves to transport T-Mobile's corporate culture and identity by incorporating corporate branding, art culture and on special occasions, live events as a visual presentation to the public.



**media facade design and T-mobile content  
provided by ag4 Cologne, Germany)**

## CHANEL, A LUXURY RETAIL STORE

The media facade is composed entirely of white LEDs that is the signature color of CHANEL. The building facade visually portrays the company brand by exploring the boundaries between fashion, art and perception.

architect is Peter Marino + Associates  
(NY,NY)

media facade by  
LED Effects (Rancho Cordova, CA)



## **GRAND INDONESIA TOWER (Jakarta, Indonesia) 2008**

The Grand Indonesia Tower features retail, a hotel, and as its center piece: a 57-story office tower. This building is not only the largest skyscraper in Jakarta, but upon completion, its video screen (96-feet wide by 450 feet tall) will be the largest LED display in the world.



Designed by Darryl Yamamoto and Andrian Velcescu

## **GRAND INDONESIA TOWER (Jakarta, Indonesia) 2008**

The entire building is a media facade and will present at least 60,000 square feet of LED arrays where the entire front of the building will be one complete video screen. The Grand Indonesia's sidewalls will also be emblazed with LED lighting that will act as visual attractors to draw people's attention to the front of building displays.

# art gallery media facades

the creation of outdoor digital viewing art galleries  
using large LED video screens as a display canvas.

Fremont Street Experience

SPOTS

BIX

Victory Media Network

# FREMONT STREET EXPERIENCE

## Downtown Las Vegas, 1995



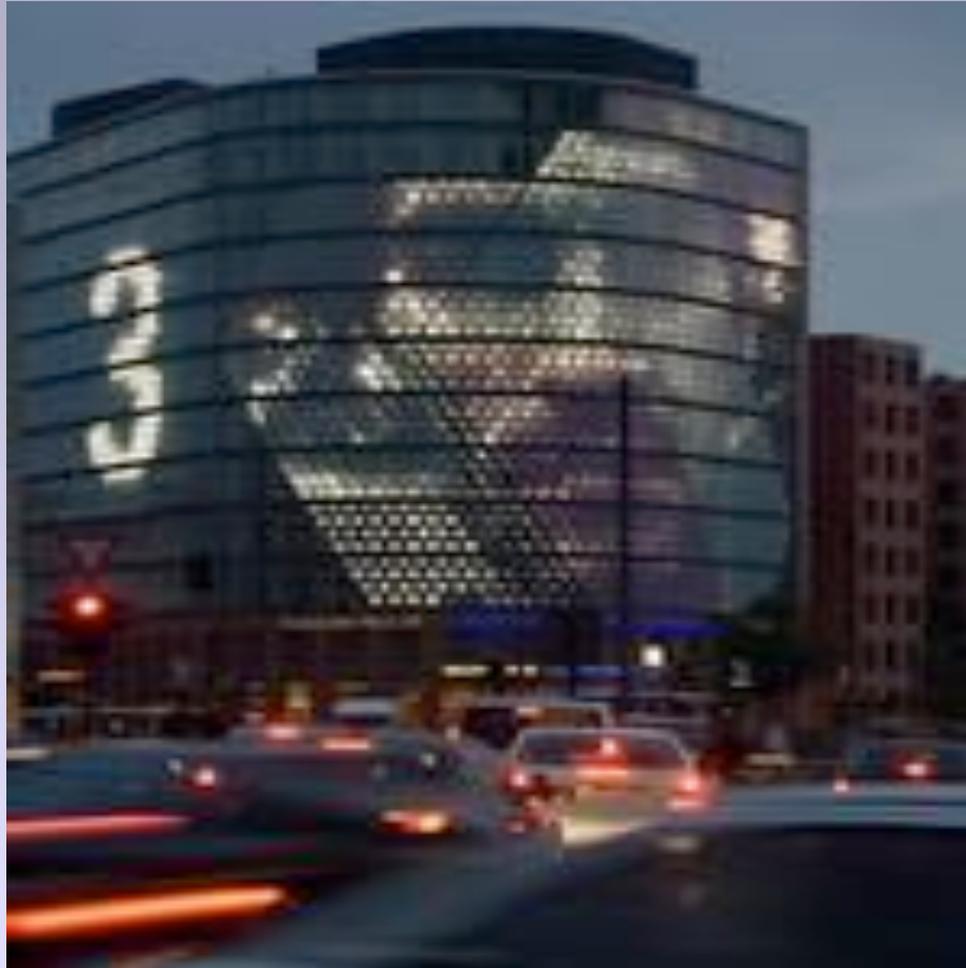
## **FREMONT STREET EXPERIENCE**

### **Downtown Las Vegas, 1995**

- sponsored by the Fremont Street casino and business community.
- overhead pedestrian canopy covers five city-blocks of open street.
- interior canopy is a vaulted ceiling with a full color LED video screen known as Viva Vision.
- Viva Vision offers a series of themed graphic/ video shows that are presented daily to the Fremont Street casino community. Video based sound and light shows include a tribute to flying, a dance revue, auto racing and an Alien encounter.
- Fremont Street Experience periodically sponsors commissioned video art projects for showing on the Viva Vision canopy.

**[www.vegasexperience.com/viva.cfm](http://www.vegasexperience.com/viva.cfm)**

**SPOTS**  
**Berlin, 2005**



**media facade design: realities:united**

## **SPOTS Berlin, 2005**

- created by realities: united
- a media facade was incorporated over a building cladding to increase the building's visibility and corporate identity within the Berlin metropolitan area.
- SPOTS was an outdoor public art gallery with a number of video art presentations shown on a daily basis in Potsdamer Platz.
- Guest video art curators have created video art shows for the building screen.

**[www.spots-berlin.de](http://www.spots-berlin.de)**

## **BIX, AN ART MUSEUM (Graz, Austria) 2003**

The BIX media facade has become an 'outside' extension of art gallery space, allowing its invited artists to exhibit their digital graphic art on the exterior building wall.

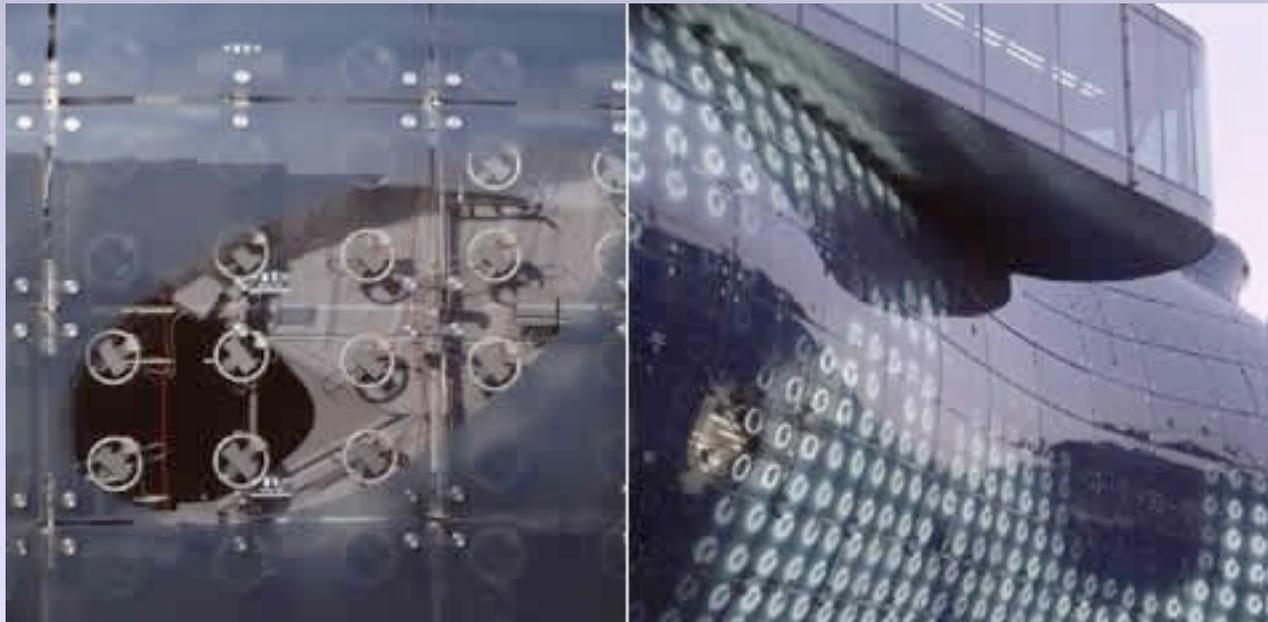


[www.bix.at/](http://www.bix.at/)

media facade design: realities:united

## **BIX, AN ART MUSEUM (Graz, Austria) 2003**

BIX is constructed out of over 1100 individually shaped opaque acrylic glass panels wrapping the building like a skin. The media facade is referred to as a communicative display skin which allows stills, films and animations to be displayed. In effect, the BIX building skin has become a giant low resolution grey scale computer display.



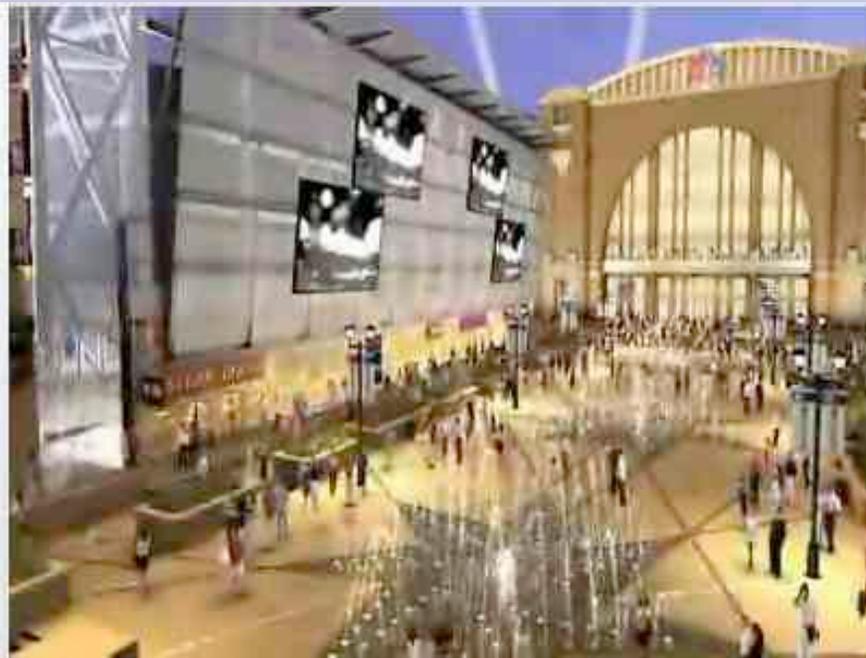
**media facade design: realities:united**

**VICTORY PARK**  
**Dallas, Texas, 2006**



## **VICTORY PARK Dallas, Texas, 2006**

Victory Park is a master planned urban development center including retail, office space, entertainment and living space. Within the retail area on the sides of two opposing five-story buildings, on each building are a series of four very large LED video screens (for a total of eight screens) which together will offer the world's largest outdoor video/digital art gallery.



## **VICTORY PARK Dallas, Texas, 2006**

- The art gallery presents stills, graphic animations and video art in an daily offering of sound, light and visual entertainment.
- Video screens are supplied by BARCO and designed to physically move back and forth across each building in ongoing changing configuration of video screen set ups.
- offers an ongoing public call for video artists to submit short (5-minute) video artworks under their guidelines for consideration within the Video Media Network screen system.
- art opportunity sponsored by Victory Media Network:

**[www.victorymedianetwork.com](http://www.victorymedianetwork.com)**

## **MEDIA FACADES AND THE SOCIAL CONTRACT**

LED video screens have created a new paradigm for outdoor communications within urban space, whereas these displays are becoming the "voice" of the community within the public spaces they appear in.



**Reem  
Media  
Building  
Abu Dhabi**

# LEAST WE FORGET: media serving the public

*THE NEW YORK TIMES, SATURDAY, JUNE 24, 2006*

SOCCER WORLD CUP



Lee Jae-Won/Reuters

Fans gathered yesterday in Seoul to cheer on the South Korean team, which finished third in the group.

Thank You.

**Louis M. Brill** is a journalist specializing in covering high-tech media imaging processes and currently writes about Applications of LEDs as applied to lighting, architecture signage and spectacular displays. His coverage is worldwide and appears in *Signs of the Times*, *SEGD design* and [www.signindustry.com](http://www.signindustry.com).

*[louisbrill@sbcglobal.net](mailto:louisbrill@sbcglobal.net)*