

The Cultural Value of Urban Screens

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In this talk I will speak about one of my most recent projects and field of research. I will reflect on the subject of urban screens and their cultural value. Unlike other talks which I usually give this one will be less theoretical, but will use the Urban Screens Manchester 07 conference which I curated as a backdrop against which I have developed my own perspective on the subject of urban screens. I mention this to manage your expectations and also to apologise in advance for providing an overview instead of delving into the subject in the utmost depth. In any case you will learn about the phenomenon of urban screens and will view it from a multitude of perspectives which will be interesting and a good basis for our discussion.

The term “urban screens” was established by the first Urban Screens Conference in Amsterdam in 2005 which for the first time described and examined the phenomenon of urban screens in detail. Mirjam Struppek who curated the Amsterdam conference defines urban screens “as various kinds of dynamic digital displays and interfaces in urban space such as LED signs, plasma screens, projection boards, information terminals but also intelligent architectural surfaces being used in consideration of a well balanced, sustainable urban society - Screens that support the idea of public space as space for creation and exchange of culture, strengthening a local economy and the formation of public sphere. Its digital nature makes these screening platforms an experimental visualisation zone on the threshold of virtual and urban public space.”

In fact the two Urban Screens conferences responded to an almost global phenomenon, the enormous increase of public light emitting displays in the urban environment, showing dynamic images. With an armada of new public screens being set up in China and the UK for the Olympic Games in 2008 and 2012, with the big screen market booming in South Africa, with spectacular and gigantic projections onto buildings like Doug Aitken’s Sleepwalkers on the MOMA, the Manchester conference tried to open up a critical debate not only on the potential, but also on the flaws and misconceptions of urban screens.

The conference was provokingly titled “It’s about content!” in order to set a perspective which long has been neglected and to distance this conference from a purely technology centred discourse. However, this claim should not be misunderstood. Adequate and innovative content for public displays can only be created with a full understanding of this new public media. And public screens cannot be designed and implemented successfully and meaningfully without the conception of the content. Consequently, the separation of content and medium is unfitting and definitely not my intention.

Urban Screens Manchester 07 expanded the scope of a conference by adding an extensive art and events programme. With the arts and events programme we tried to exemplify the cultural potential of public displays. The programme ran on three large LED screens 24 hours for 4 days and brought to Manchester an international screen programme ranging from interactive works, games, live streams with a performative character, roaming projection to video art and animation. More than 90 artists and creators contributed to the programme. We cooperated with a number of local, national and international organisations and institutions such as the Art Center Nabi in South Korea.

Talking about the cultural value of urban screens is a difficult undertaking. I would argue that although urban screens are an almost ubiquitous phenomenon we have only just

begun to understand their potential for community life, for architecture and for urban planning, for culture in general.

Following McLuhan to his famous and repeatedly misunderstood claim “The medium is the message”, we must try to reveal the often unnoticed and unobvious change caused by urban screens in order to learn about the true nature and characteristics of this new public media. Only through a full understanding of this new medium we will be eventually equipped to influence its evolution for our own benefit and before its downside effects become pervasive. As McLuhan reminds us “Control over change would seem to consist in moving not with it, but ahead of it.”

Antecedents of urban displays

Cultural historians of the next century will probably look back at the beginning of the 21st century and distinguish it as the time when the dynamic image significantly impacted on urban public space, even though the first giant outdoor screen showing moving image was that of the Lumière Brothers on a popular ice rink on Champs-Élysée at the end of the 19th century.

As the importance of urban screens in contemporary culture increases, the task of understanding their cultural roles increases. Yet in addition to their present manifestations, we also need to understand their earlier forms and the ways in which they have developed. The meaning of the screens in contemporary culture cannot be fully grasped without exploring their antecedents and placing these within the contexts of their own times. So first I would like to briefly draw your attention to historic public screens, with the assistance of media archeologist Erkki Huhtamo and art historian Uta Caspary.

In his essay “Elements of Screenology: Toward an Archaeology of the Screen” Huhtamo traces the public screen back to the ancient phantasmagoria shows that originated in the 1790s and remained popular for decades. The audience were presented images, many of them depicting monsters, ghosts and apparitions, projected on a semi-transparent screen. The figures seemed to grow or diminish dynamically. The trick was realised by using wheel-mounted magic lanterns (“fantascopes”) that were pushed forward or pulled backward along rails behind the screen.

Belgian optician Robertson, (Etienne-Gaspard Robert) travelled round Europe during the last decade of the 18th century, with his special shows in which he used these techniques with the aim of 'scaring people to death'. The invisibility of the screen, which was often achieved by making it wet, was meant to dissolve the boundary between the reality of the auditorium space and the world of fantasy and the occult penetrating into it.

Other antecedents of the urban screen are

- large-scale magic lantern projections in public outdoor spaces, which were mainly employed for advertising and the broadcast of news.
- shadow play which predominantly used puppets, but as we have learned from Samuel van Hoogstraten’s drawing (1675) was also performed by real actors on stage.
- as well as son et lumière presentations, a form of night time entertainment that was usually presented in an outdoor venue of historic significance. Special lighting effects were projected onto the façade of a building or ruin and synchronised with live narration and music to dramatise the history of the place.

Early manifestations of these son et lumière events date back to the Baroque era, so do public fireworks which created images of light in the sky and animated objects such as the

dragon puppet at public performances. Interestingly these ancient techniques and forms of light spectacles have almost the same functions as most contemporary urban screens:

- entertainment through public viewing events
- the illumination of physical urban objects
- commercial advertising
- news broadcast.

The second strand of the antecedents of urban screens, particular of media façades, is constituted of screens which are embedded into architecture. Ancient Egyptian temples were enveloped with hieroglyphics; Greek and Roman temples were richly ornamented with sculptures; both could be perceived as instances of what Robert Venturi calls “billboards for a proto-Information Age”.

Since their appearance, media façades have been paralleled with gothic cathedral architecture. Both are perceived as originating in a radical change – societal as well as technical and artistic. With the ubiquity of today’s street light we tend to forget that the gothic glass panels which replaced the stone wall must have had a huge impact on its exteriors in previous times. With the illumination of the interior before dawn and after dusk the windows turned into illuminated, colourful screens revealing to the distant viewer an abstract pixelated image and to the close-by viewer a complex, narrative-like iconography.

Finally, let’s make a huge jump into the last century when luminous buildings emerged with the widespread introduction of electricity in the late 19th century. Apart from its use as street lighting, artificial light was used increasingly to accentuate the symbolism and monumentality of buildings, especially of their ornamental façade details. The earliest examples of this are the Wrigley Building in Chicago, the Singer Building and the Woolworth Building in New York.

One of the earliest examples regarding light or media architecture in Europe is the headquarters for “De Volharding” (“Perseverance”), a social cooperative based in The Hague. With its big glass façade, designed in 1927/28 by Jan Willem Buijs und J.B. Lürsen, the building is reminiscent of the aesthetic of the avant-garde “De Stijl”-movement. Apart from a glazed stairwell and lift shaft, Buijs’ design included horizontal bands of glass spandrel panels. These served as illuminated signs by night; both text and iconic messages could be changed from inside.

After its completion, the façade sparked a heated debate about the integration of advertising into architecture. With the dawn of the industrial and later capitalist era, architecture became more and more an “instrument for brand communication”: it was used as a means of identifying a certain brand, as a signal for a company. Architecture seemed to support the principles of “branding” and “corporate identity”. Whilst these terms were not introduced before the 1990s in Europe, the phenomenon itself existed previously: traditional architectural ornament with its symbolic content being a predecessor of the “logo” in architecture.

Media façade as permeable membrane

As we could see, light operated screens were employed in architecture for multiple purposes. It is fascinating to consider gothic glass windows as public branding or billboards advertising religious values and codes. In this regard, the gothic glass screen would fulfil Joachim Sauter’s requirements for a media façade. Sauter is the media designer behind the

art+com company based in Berlin. He approaches the subject of the façade from its etymological roots in the Latin term 'facies' – face which is more than just a visual surface but an integral part of the body, a dynamic means of expression, capable of expressing inner conditions and of communicating with the outer world. Sauter applies this set of functions to his media façades and calls for a tight relation between the buildings' purpose and inner processes as well as the type and content/narration of the media façade. In addition to this he promotes the dissolution of the rectangle and attached (LED) screen with a seamless integration into the architectural body and urban fabric.

However this strict 'form follows function' rule is rarely applied to permanent media façades. Apart from Sauter's own designs for a Berlin train station there are only few buildings which incorporate the concept of façade as permeable membrane between the inner processes of the building and the exterior cityscape. In concept, Sauter converted the glass roof of the new train station in Berlin into a live screen displaying the movements of trains inside the building. Although the train station was built and art+com won the competition for the integration of a media element into the façade, the concept was not realised mainly due to financial cuts.

Diller and Scofidio's permanent installation *Facsimile* on the façade of the new Moscone Convention Center in San Francisco follows the same "membrane" principle. At the same time, the supplementary screen satirises this principle and plays with the viewer's anticipation.

The about 5 m high by 8 m wide video screen is suspended by a vertical armature at the parapet and soffit of the building. A live video camera is fixed to the armature, positioned behind the screen, pointing into the glass building. The structure travels slowly along the surface of the building and broadcasts live views on the screen as it moves. The transparency of the glass building is enhanced through this virtual transparency. While the live view naturally corresponds with the speed and direction of the scanning motion, a series of pre-recorded programmes are constructed to simulate the same speed. The programmes are fictional vignettes that substitute impostors for actual building occupants and spaces.

Facsimile could be seen as a scanning device, a magnifying lens, a periscope (a camera at a high elevation looks toward the city), and as an instrument of deception.

Marriage of commercial and artistic content

The reasons for the rare existence of true symbiosis of architecture and display media are manifold; but the main obstacles are still the late involvement of media designers in the architectural planning processes and the developers' desire for multipurpose screens which can display various types of content. Background to this is the ongoing search for models of economy which make both the purchase and design of expensive display systems and their programming affordable.

Consequently most developers and clients prefer screens on which commercials can be shown for the sake of revenues. Just to name two examples of this common trend: *Selfscapes* is a supplementary façade made of a Mediamesh screen which will shortly be added to a historic building in Piazza Duomo in Milan. The project claims to be "the first Italian media façade" and "its cultural programming involves a synergy between culture, communication and advertising". The first non commercial project which will be shown involves a national competition inviting Italians to send their self-portraits via a web interface to the screen. These images will be still, although the technology is also able to display

moving image, even though the resolution of this translucent led-mesh is rather low in comparison to other available technologies.

The Grand Indonesia tower (Jakarta, Indonesia) is a 57-story skyscraper covered with two LED videoscreens. The low-resolution back screen presents abstract motion art and the high-resolution foreground screen periodically presents advertising and branding content along the face of the building, this builds visuals (both high and low resolution). The tower comprises of approximately 60,000 sq. ft. of LED video coverage along the exterior curtain wall.

Such media façades provoke the question if a successful and culturally valuable marriage between commercial and non-commercial, art-related content can exist at all. Can the penetration of the cityscape through massive and dynamic commercial images be legitimated by the interspersation of art? At the Urban Screen conference one speaker called for a regulation of public screens by law and for the introduction of slots (for instance 20 percent of the programme) for the presentation of non-commercial content on any urban screen.

I doubt that such a provision solves the problems which arise through the proliferation of commercial dynamic image screens in the urban environment. Urban screens are located in an environment where audiovisual density increases without hesitation. So far, buildings, streets and pavements have been the stable and rigid grid on which movement unfolds. With the introduction of light systems displaying dynamic image, this foremost steady architectural matrix is animated and becomes dynamic itself. By integrating screens into the existing infrastructure or setting up self-contained screens, another layer of fast moving, dynamic information is added.

The dense agglomeration of people in an urban setting is naturally a highly attractive and potentially successful advertising tool for the display of commercial campaigns and visual propaganda, which explains the increase of neon signs, giant posters, LED screens and even of commercial large screen projection in the past years. In most urban congested areas, the demand by advertising companies for commercials exceeds the existing advertising platforms. The city of Zurich for instance has consequently expanded its advertising infrastructure particularly in the already highly frequented traffic zones.

There is only a singular opposition to this common trend for expansion. At the beginning of this year the mayor of Sao Paulo has shocked the world by banning outdoor branding and advertisement. Although this happened not for aesthetic reasons but in order to control unauthorised advertisement, this edict dramatically altered the appearance of the city and was greatly discussed in media.

Besides the most obvious impact of urban screens on the aesthetic appearance of the city, the question must be asked if the adding of large scale vibrant images to the already dynamic cityscape overstrains the capacity of human perception. What is the definition of “too much” with regards to dynamic surfaces in public space? While there is no scientific evidence that these intense and rapidly changing audiovisual environments exceed our capacities, we can only hope that they don't affect us too much and that our capacity to cope with an environment like this grows with the challenge.

Embedding screens in architecture

These days the majority of urban screens are rectangular LED screens attached to buildings which predominately show traditional advertising, not taking into account that the urban screen is a different medium to the TV set.

We must ask the question, if there are existing formats of moving image which are suitable for display in urban space. Or do urban screens request completely different designs and content which still have to be developed? Does the audiovisual density and fast rhythm of the city demand a completely new aesthetics of both the screens and the content on display?

One of the most compelling and convincing concepts of urban screens is the transformation of architecture into a multidimensional screen which extends the 2D flatness and accomplishes a real spatial experience in correlation to the surrounding three-dimensional architectural space of the city.

The first 'screen' of this type was conceived by the German artist Mischa Kuball in 1990 for a high rise office building in Düsseldorf. The artist allowed the building to retain its daily function as a place of work; it was not until after working hours, when the building is nothing more than an empty shell, that art takes command of the exterior. Over a period of 6 weeks the office light was switched on in sections of the building, thus creating a different "Megasign" (*Megazeichen*) every week. The full artistic programme was accomplished at the end of the 6 weeks of the display.

More recent transformations using state-of-the-art computer systems turn buildings into dynamic light sculptures, such as *Twist and Turns* by MaderStublicWiermann and the recent enlightening projects of the Dexia Tower in Brussels by LAB[au]. Both groups approach urban screens as being a spatial and temporal programming of light which can create a relationship between the building and the city, entirely transforming the conception of the media façade as generic content displays towards new vectors of architecture, art and public space.

For the permanent enlightening of the Dexia Tower, the project *Who's afraid of Red, Green and Blue* draws reference to the philosophy of Barnett Newman, researching a symbolic value in abstract art by using colour and time. The first artwork of the series was established through the display of a graphical time-construct while using RGB as a code for hours (Red), minutes (Green) and seconds (Blue). During a complete year, a variation on the theme is presented every two weeks. For the Time Tower, from sunset to sunrise, actual time is displayed on the tower through additive blended colour-surfaces, constructing upwards towards midnight when reaching the ultimate addition of coloured light; white. A white pulse celebrates the new day, from which the light is progressively returned to the sky.

The second project for the Dexia Tower, The Weather Tower displays the following day's temperature, cloudiness, precipitations, and wind, by using colours and geometrical patterns to visualize these data.

A colour-code corresponded to tomorrow's temperature compared to the monthly average, linked to a scale of colour-temperatures ranging from violet (-6° or colder), blue (-4°), cyan (-2°), green (monthly average), yellow (+2°), orange (+4°) to red (+6° or warmer).

The façade of the Uniqa Tower in Vienna is a wide mesh of embedded LEDs. The architects MaderStublicWiermann designed the grid in order to transform the building into an abstract, temporal form. Every night a dynamic light performance takes place which

gradually dissolves the given form of the building and establishes new three-dimensional shapes, adding new virtual layers.

Long-term processes added to urban space

This animation of architecture by the means of light is a very interesting development because it is loosely related to historic son et lumière events or the static illumination of skyscrapers. I would argue that these non-narrative and abstract light performances constitute a new genre which possesses an autonomous artistic quality in contrast to a lot of other traditional screen formats which are just readapted for public space. In my opinion the cultural potential of urban screens lies in the customisation of screens and its merge with architecture, so that the rectangular screen becomes obsolete.

At the same time the way in which these nightly performances are designed bring up critical questions about what I call the permanent spectacle. The art critique Paul Ardenne stated:

“The fact that an artist encounters the public directly does not guarantee an aesthetic effect per se. Art in public space has been reutilized often and has become a key figure in cultural politics, moreover it seldom is more than a fairground attraction (some kind of contemporary version of circus) and it subdues to a changed perception. The public perceives less the conceptual dimension of the artwork but its quality as spectacle which it is offering.”

What we can observe with these works, despite their formal straightness, is that they have a massive visual impact on their surroundings and that they execute a performative and event-like gesture which becomes through its ongoing repetition a kind of permanent spectacle. Such a permanent spectacle is a contradiction in itself and in the future I would like to see more concepts which respond to the density and velocity of urban space by adding a different time layer to the space, instead of reduplicating and increasing the given temporal nature of the urban space. What I mean by this is slow processes which evolve over time and which create a sense of identity of the space.

With his project series *Software as Furniture* the British designer Daniel Brown explores this direction, even so far he could not realise his designs on outdoor screens. He creates pieces which aesthetically merge with the environment they are designed for; the screens become a visible but not predominant element of the space. The implementation of the screens is as equally critical as the temporal nature of his pieces which are based on software programmes that generate visuals in real time and are virtually endlessly. As a result the slow evolution of his pieces is hardly noticeable on one day, but the frequent and ongoing ambient observation of the piece allows the recognition of slight alternations and additions, its growth. If transferred to a dense public space, this slow development speaks to people who use the space on a permanent basis without capturing their full attention.

Jochen Gerz' work and particularly one of his older pieces, the Monument against Fascism from 1986, to me is a sound example of the cultural value which urban screens can and should possess. Interestingly this work is not digital at all, but involves a long term, dynamic and temporal process and creates the identity of a space and of a community.

Gerz who began working in public spaces in 1968, doesn't consider himself an author or a visual artist but rather as someone who "goes public", who moves against a veil obscuring reality, beginning with the arts and extending to the reproducing mass media. Core to his

work is the fundamental attitude of questioning communications systems, which perceives the form of communication in its content dimension.

Jochen Gerz and Esther Shalev–Gerz created a 12-metre tall lead coated square column inviting the city's residents and visitors to engrave their names and sign against fascism on the monument. As soon as the accessible part of the monument was covered with signatures, it was lowered into the ground. Between the inauguration on October 10, 1986, and its disappearance on November 10, 1993, the *Monument against Fascism* was lowered into the ground eight times. Today, a text in seven languages recounts the history of the *Monument against Fascism*: the 70,000 signatures, the sinking of the column and its disappearance.

The identity creating nature of participatory projects

Besides other qualities of this artwork, it is one aspect of the piece which I find striking: The open and participatory concept of the piece which even allows misuse by people who just take the opportunity to leave some trace of themselves in public space. Apparently, these days, this is one of the strongest motivations for participating in such kinds of projects, as well as to tag walls or scratch windows.

Interestingly participatory projects on urban screens or concepts of urban screens, which involve strong participatory elements, are rare and often limited to simple games or responsive applications. But seldom and almost never the voice is given to the public without censorship. The legal situation in most countries in which the screen operators are liable for the content, prevents them to make the screens really accessible to the public.

In Manchester we showed the project *15 x 15* on one of the screens. This application represents a type of participatory projects which plays successfully with people's desire to publicly expose themselves. In this case this was achieved by sending video portraits via mobile phone to the screen.

Even projects like *15 x 15* are monitored so that no content appears on the screen which might offend people, for example using expressions of sexuality, violence or racism. Although I appreciate the initiative to keep public space 'clean' from visual dirt, I am always bewildered by the fact that today's public space is not understood as public in the sense of the Greek public agora. Whilst in public space being surrounded by visual messages that promote consumption, and for instance an arguable conception of the female gender, officials feel threatened by the possibility that someone could contribute content which is not politically or ethically correct or that the society could be misled, harassed and unable to deal with it in appropriate ways. In Manchester Jason Lewis from Concordia University pointed to the fact that (Quote from Armando Petrucci, in *Public Lettering*, 1993)

"The...visitor to any city in the Roman Empire between the first and third centuries B.C. would have been struck not only by...the ubiquitous presence of writing--in the squares and on the streets, on the walls and in the courtyards; it appeared on hanging wooden tables or traced on squares of white and was painted, engraved, carved, or handwritten. These writings were all very different from each other in appearance and also in content, which may have been political, funereal, commemorative, or commercial. Sometimes the messages were public, other times extremely private. Produced by individuals belonging to the most varied levels of society, these writings were visible everywhere indifferently scattered wherever space could be found: near the entrance of a shop, at a crossroads, or any clean patch of wall."

Inspired by this finding, Jason Lewis together with his colleagues at Concordia developed *CitySpeak*, a public authoring tool for screens preferably in public space using txt messaging. By taking on the contemporary form of a public blackboard and mixing it with online chatting, graffiti and texting *CitySpeak* creates an intersocial space in public. In times of growing social and cultural discrepancy urban screens could become a tool for communication and community building in ways we have hardly seen if we actually would provide a public access to those platforms.

I would argue that we have to go through a phase of experimentation and exploration before we fully understand which social interactions can be triggered by the employment of screens and by taking the huge cultural differences in acting in public space into account.

A very good example for this cultural difference is the success of the *DIY Ballroom* project by British artist susan pui san lok. The project invited amateur dancers to take to the floor in a seemingly spontaneous formation while the screen showed a new video work exploring the concept of amateurism and ballroom as a form of local, international and cultural dance. Whilst I am sure that such an event would not have been successful in Germany where there is a tradition of public dance by the elderly, the Manchester audience got involved to a degree which exceeded my expectations.

Another example for this kind of work, which some of you might know is Rafael Lozano's *Bodymovies* which is inspired by the Samuel von Hoogstraten's drawing the shadow play which I showed you in the beginning. People immediately understand what this project offers to them: a public stage on which they can interact live and experiment with the system.

Screen based participatory interventions like this are able to create temporary communities and to provide an intense experience of social interaction, finally resulting in a strong sense of identity and shared cultures.

Looking into the future of urban displays it is rather certain that gaming will increase on these media platforms. So far games played on urban screens have barely exceeded simple interaction; this of course due to the fluxionary nature of urban space.

The merge of virtual and real public space

Another interesting trajectory of development can be found in the merge of virtual and real worlds on urban screens that Paul Sermon tested in Manchester with his project *Liberate Your Avatar*, an interactive public video art installation incorporating Second Life users in a real life environment. Paul Sermon best known for his telepresence research recreated the actual All Saints Gardens on Oxford Road where we had positioned one of the screens within Second Life, allowing both members of the public and virtual inhabitants ('avatars') of Second Life to coexist and share the same park bench in a live interactive installation. This installation transformed the 'Urban Screen' situated in All Saints Gardens into a portal between these two parallel worlds. By positioning the 'Urban Screen' as the mediator of change, the installation examined the history of 'All Saints Gardens'; relocating Mancunian Suffragette Emmeline Pankhurst as an avatar within Second Life. Here she now remains locked to the railings of the park, reminding us of the need to continually evaluate our role in this new online digital society.

When exploring this merge between virtual and real architectural space, it is worth to also look into virtual environments which are less restricted by technical given factors, but whose

developers can image the linkage and hybridisation of spaces through urban screens in new ways. As one example I would like to show the hypermediated building *IMPLANT* which is situated inside the Art Nouveau building of Vooruit, a performing arts complex in Belgium. Navigating with a mouse, keyboard, and projected onto various surfaces, online visitors from Montreal, Rotterdam, and Gent together explore what first appears to be a sumptuous 3D simulation of Vooruit - a large maze of theatre spaces, cafes, meeting rooms, and offices. These can be traversed in much the same way we move through physical space walking upstairs, through doors, down corridors, around corners, inside and out.

But this logical order soon gives way to architectural and spatial inversions and re-perceptions. As visitors move through the building, their glowing paths reveal a hypermediated environment of text, real time chat, pre-recorded and live streaming video of artists, activists, and curators, reflecting upon the conditions of urban life and technology, cultural hybridity, and the virtual self. Each visitor's trajectory through *IMPLANT* re-narrativizes the building and its function, offering multiple, simultaneous points of view that cannot be easily reconciled. Viewers share their real-time journeys with each other by taking up in-world virtual cameras that project immediately what they see onto specific walls located throughout the building. What appears to be a mere projection, however, is actually an entire 3D rendering of that portion of the world, allowing viewers to instantaneously enter the image and join their fellow users in another part of the newly constructed world.

Outside, on the actual street, passersby peer into Vooruit glass lobby only to see a projected simulation of the same lobby seamlessly integrated within Vooruit's façade. Instead of seeing the usual theatergoers purchasing tickets and socializing with friends, viewers observe the goings-on of avatars, real-time graphical representations of actual people in Vooruit co-mingling and exploring the same simulated space with their counterparts. At the same time, a web cam outside Vooruit captures the scenery on the street, projecting the performances of everyday life back into the virtual world.

Of course at the end of this talk, there is still a lot to consider and to discuss in the field of urban screens which I have no time left to address. I could go on talking about public viewing and how Germany mutated to a national public viewing environment during the soccer world cup.

In Berlin people transformed their little backyards into open air screening sites, offering seats, beer and sausages to passer-bys for free. Those who did not own a projector turned their TV around on the window sill, so that they could watch it together with friends while sitting on the pavement -- and how this joyful and shared experience of watching football in public massively changed our national identity.

Thinking about urban screens and how they could be designed and employed in culturally valuable ways has just begun and should not limit itself to arguable concepts of the public and be reduced to the least common cultural nominator. I would instead follow Deleuze, although he referred to cinema, when he stated that "the brain is the screen". He advised that we should look "to the biology of the brain (...) for principles, because it does not have the drawback of applying ready-made concepts."

Links

Research by Mirjam Struppek
www.interactionfield.de/

Urban Screen Conferences
www.manchesterurbanscreens.org.uk
www.networkcultures.org/urbanscreens/

art+com
www.artcom.de

Diller + Scofidio, Moscone Building
www.dillerscofidio.com/facsimile.html

Selfscapes
www.urbanscreen.net/

Mischa Kubal, Megazeichen
www.mischakuball.com/view?id_article=10&id_document=221

Lab[au], Dexia Tower
www.lab-au.com/dexia/2007/who-is-afraid-of-rgb/index.php

MaderStubičWiermann, Twists and Turns
www.webblick.de/twists_and_turns/twists_and_turns_videoprev.html

Daniel Brown, Software as Furniture
www.danielbrowns.com/saf.html

Jochen Gerz, Monument against Fascism
www.gerz.fr/html/main.html?res_ident=5a9df42460494a34beea361e835953d8&art_ident=76fdb6702e151086198058d4e4b0b8fc

Richard Vickers, 15x15
www.15x15.org/

susan piu san lok, DIY Ballroom
<http://www.biggerpictureuk.net/commissions/susan-pui-san-lok>

Rafael Lozano-Hemmer, Bodymovies
www.lozano-hemmer.com/video/bodymovies.html
Paul Sermon, Liberate Your Avatar
www.manchesterdda.com/article/198/

Workspace Unlimited, Implant
<http://euler158.test.ibbt.be/implant.mov>

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www.sujaschko.de