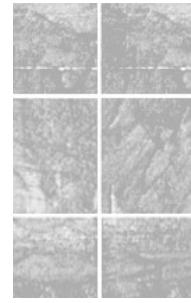# The social potential of Urban Screens

**MIRJAM STRUPPEK**
**Urban researcher, Berlin**

> Public space is the city's medium for communication with itself, with the new and unknown, with the history and with the contradictions and conflicts that arise from all those. Public space is urban planning's moderator in a city of free players. (Christ, 2000)

How can the growing digital display infrastructure appearing in the modern urban landscape contribute to this idea of a public space as moderator and as communication medium? The conference URBAN SCREENS 05 held in Amsterdam in 2005 formed the starting point of my investigation into the potential of outdoor screens for urban society for which we created an online information platform and network of exchange [www.urbanscreens.org]. How can the currently dominating commercial use of these screens be broadened to display cultural content? Can they become a tool to contribute to a lively urban society involving their audience (inter)actively? Urban



**Figure 1** Art screening by Strictly Public in Berlin, February 2004. © Photo by Mirjam Struppek.

Screens could form a new integrated digital layer of the city that would redefine the function of this growing infrastructure.

Urban Screens can only be understood in the context of the rediscovery of the public sphere and the urban character of cities, based on a well-balanced mix of functions and the idea of the inhabitants as active citizens. Urban Screens combines the function of public space for commerce and trade with a cultural role reflecting the wellbeing of urban society: digital moving displays with a new focus on supporting the idea of urban space as a space for the creation and exchange of culture and the formation of a public sphere using criticism and reflection. Their digital nature makes these 'screening platforms' an experimental visualization zone on the threshold of virtual and urban public space.

So far the main target of this infrastructure has been to manage and control consumer behaviour with a recent incorporation of 'interactive features'. Companies are starting to realize that moving billboards are a powerful medium for communicating their goals and missions in line with the new paradigms of the digital economy.

Sensitizing engaged parties and demonstrating the possibilities of using this digital infrastructure in different ways is the first step towards opening up these screens – currently dominated by market forces – for the display of cultural content and the exchange of information. The contribution that these screens would then make to a lively urban society would integrate them more into the communal context of the space and therefore help to create local identity. Harmonizing the content, location and type of screen would determine the success of interacting with the audience and also help to prevent noise and visual pollution. So what exactly is our future vision of a screens world? What trends and possible content do we see for Urban Screens?

## GENERATING JOINT EXPERIENCES

A first major development towards broadening the content of large digital outdoor screens has been the transfer of TV features, slightly adjusted to the new circumstances. In the context of an event culture that has evolved in urban space, outdoor screens are used alongside current news for joint entertainment, such as concerts, film screenings and sports events, thus realizing Guy Debord's 'society of the spectacle'. His critique of a society 'in which the individuals consume a world fabricated by others rather than producing one of their own, organised around the consumption of images, commodities, and staged events' (Best and Kellner, 1997: 82) should not be underestimated.

The BBC experiment in collaboration with Philips and local city councils in various cities in the UK is a forerunner to TV broadcasting stations that specialize in the urban public space and its local community. They coordinate outdoor film screenings, special events, the collective

**Figure 2** Watching football on the Big Screen in Manchester – celebrating victory. Photo by Mike Gibbons.

watching of football games and special city-TV news channels and art screenings. A 'networked web of spatial narratives' with the fractured character of the mass media world is emerging (Wallace, 2003).

Located preferably at core locations in a setting suited to a wider audience, these memorable venues will surely contribute to a city of landmarks, referring here to Kevin Lynch's (1960) 'image of the city', providing local orientation and identification through joint experiences. A local collective memory can indeed be developed if a rich and complex local culture can be maintained and supported through these screens.



**Figure 3** Cultural screening at the BBC Big Screen in Liverpool. Photo by Mike Gibbons.

In this sense, the BBC–Philips project of community screens searches out a mixture of special events and collaboration with local art institutions outside the usual BBC programmes. A growing interest in connecting the infrastructure of screens with cultural centres and institutions preserving and producing digital content as 'video art' is also demonstrated elsewhere. For example, the Schaulager in Basel, the Ars Electronica Center in Linz and Federation Square in Melbourne (which hosts several art spaces); also the Kunsthaus in Graz, which integrated screening platforms onto its facade to reach a new audience of passers-by, thus bringing its cultural content into outdoor public space. In particular, the Kunsthaus experimented with BIX, an art screen that becomes part of the architectural skin.



**Figure 4** The digital screen at Federation Square in Melbourne, Australia. Photo by Meredith Martin.
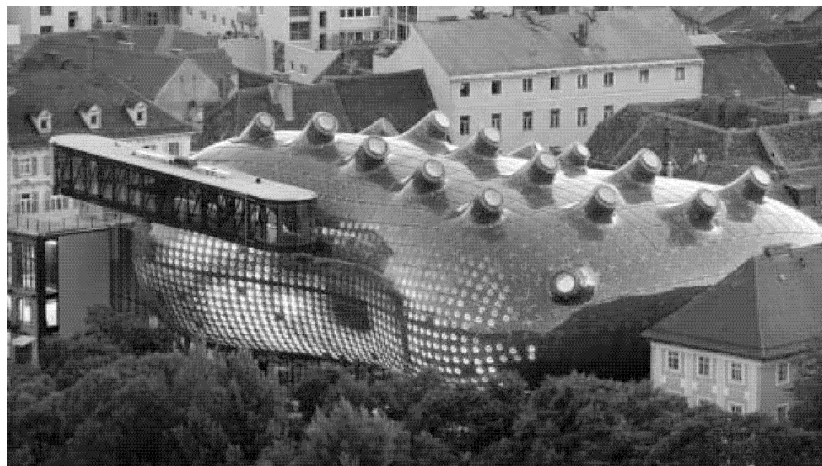


**Figure 5** The BIX façade by realities:united at Kunsthaus, Graz. © 2003 Harry Schiffer, Graz.

## SCREENS SUPPORTING THE DEVELOPMENT OF A LOCAL COMMUNITY

The orientation, location, size and shape of a screen are crucial for determining content strategies in addressing a specific audience as well as creating a connection with the screen's surroundings. Cities have recently become more and more engaged in the struggle against a feeling of 'place-lessness' caused by the spread of international architecture and branded shopping that pays no attention to local characteristics. Besides creating architectural landmarks, the consideration of the locality and site-specificity of Urban Screens, both in shape and content, could help to prevent further disconnection in the perception of urban space. We need to create screening platforms that citizens can appropriate and start to consider as their own.

The Creative Industries Precinct (Australia's first site dedicated to creative experimentation and commercial development in the creative industries, located on the western fringe of Brisbane's central business district) integrated three screens into its complex of buildings. These screens focus specifically on identifying and addressing different publics, including commuters on the main traffic route, the specific audience of the institute in the inner courtyard and the newly emerging residential community, and use large screen interactivity to create a platform for supporting the development of a local community (as Peter Lavery explained in his presentation at the URBAN SCREENS 05 conference).



**Figure 6** The orientation of the three screens at the Creative Industries Precinct. Marked-up photo by Peter Lavery.

In considering the social sustainability of our cities, we need to look closer at the 'liveability' and environmental conditions of public space; if people are to be encouraged to appropriate public space, new supportive strategies are needed in which they can take on the role of pro-active citizens, not just law-abiding consumers. Several recent media installations in public spaces have explored various possibilities of reactivating urban space and its public sphere (Struppek, 2002). Screening infrastructure has also been used by artists for participatory processes involving audience interaction.

Among other projects experimenting with personal multimedia messaging service (MMS) images on community screens, the Creative Industries Precinct has been involved in the *The Peoples' Portraits* project (2004) by Zhang Ga, which reflects on individuality and cultures, and strengthens the understanding of modern 'glocality'. In this project, people create their own portraits in special photo booths and then send them around the world to a network of screens. In cities such as Rotterdam, New York, Brisbane and Singapore, these local photos of passers-by are instantly and simultaneously displayed on large screens, thus creating connections between people of widely varying cultural and ethnic backgrounds.
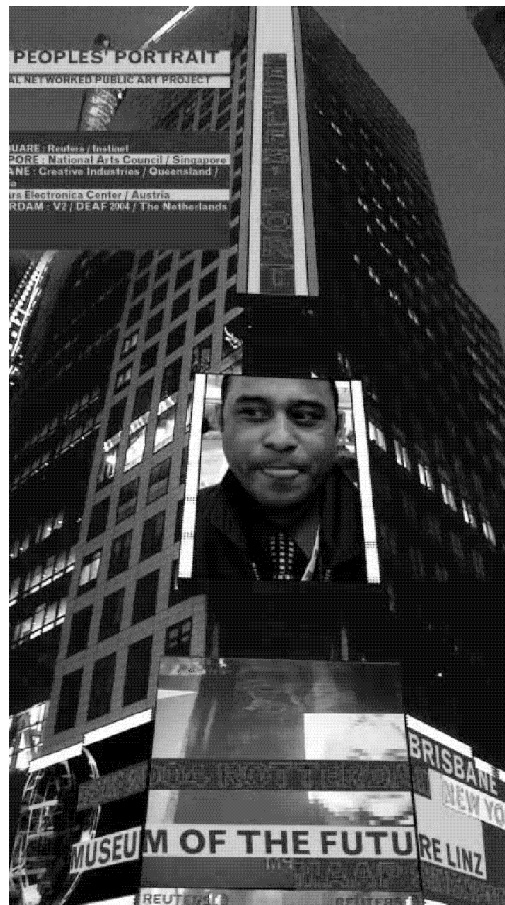
**Figure 7** *The Peoples' Portraits* by Zhang Ga, Times Square, New York, 2004. Photo by Peter Lavery.

A frequently recurring idea for the use of screens is to enhance the connection of remote communities through shared visual displays such as video conferencing. These types of installation reflect the relative meanings of the terms 'close' and 'remote' in a globalized world. *Hole in Space* (1980), the first installation of this kind, connected the public walking past the Lincoln Center for the Performing Arts in New York City with the people at 'The Broadway' department store in Century City (Los Angeles) through life-sized TV images. *Hole in the Earth* (2003–4) used an installation in the form of a well to connect people in Rotterdam to people in Indonesia using screens, cameras and microphones.



**Figure 8** Opening of the installation *Hole in the Earth* in Rotterdam, December 2003. Maki Ueda's website images.

*Re:site Projects* (2002–3) formed part of a special arts programme, guiding the growth and development of a new urban community near Munich. A simulcast from videostreams recorded in public spaces was matched up with relevant videos from local youngsters; automatically selected cut-outs from a database and text contributions from the interactive chat function on the *Re:site* homepage were displayed in these projections. Thus a collage was developed from a fleeting present and a timeless past. The real-time pictures were recorded at clearly marked locations in the Riem quarter of Munich so that inhabitants could co-design images of their own neighbourhood. These were shown on monitors placed in the street and on two screens located at the Messestadt West subway station as well as on the internet. The aim of *Re:site Projects* was to create space for people to express and exchange opinions on local urban development and change.

The spread of electronic gadgets such as mobile phones and video cameras facilitates the production of digital content. New platforms will be needed to share this increase in digital productivity. The artist Perry Bard has been working on video projects carried out in collaboration with community groups who have little access to technology. She is experimenting with the

**Figure 9** A live recording installation of *Re:site Projects*, Messestadt Riem, Munich (2002). © Photo by Edward Beierle.



**Figure 10** *Walk This Way*: a mobile screen expressing the transitory nature of place. From Perry Bard Presentation at Urban Screens 05.

collaborative production of content for local public screenings as an alternative to mainstream media: 'They are about voice, about representation, about using the dominant technology to subvert its most obvious efforts' (Bard, 2005). Bard's project, *Walk This Way* (2001), is an e-directed video installation about the transitory nature of place, in which a 9-minute video loop was projected from the rear of a truck at Market Square, North Ormesby, UK. Also, teenagers in Middlesbrough involved local community members in a discussion about their environment in the past and present. Through a director's forum at a website, their collected images and sound were uploaded in the UK, sequenced through discussion on the site, then downloaded and edited in New York by the artist.

## SUPPORTING SOCIAL COMMUNITY NETWORKS

The attractiveness of a local environment is naturally experienced subjectively; however, a healthy social interaction and information network in a local neighbourhood can play an important role and, above all, give a feeling of security. In the tradition of the blackboard, interactive screens integrated into urban furniture can help to circulate and access data for comments, stories, or conversations that characterize and strengthen the local community.

Addressing the issue of fear in urban spaces, a network of *Chat Stops* designed by the group 'rude architecture' are equipped with interactive video technology. Thus people waiting at different bus stops can communicate with each other. If desired, a video conference can be initiated with people waiting at other chat stops. These stops provide a feeling of security and the boredom of waiting for buses can be alleviated by having conversations with people at other stops. In this project, voluntary, transparent and entertaining video communication replaced the more customary official video surveillance.



Figure 11 *Chat Stop* – communication instead of surveillance. Designers: Friedrich von Borries, Gesa Glück, Tobias Neumann and Andre Schmidt.
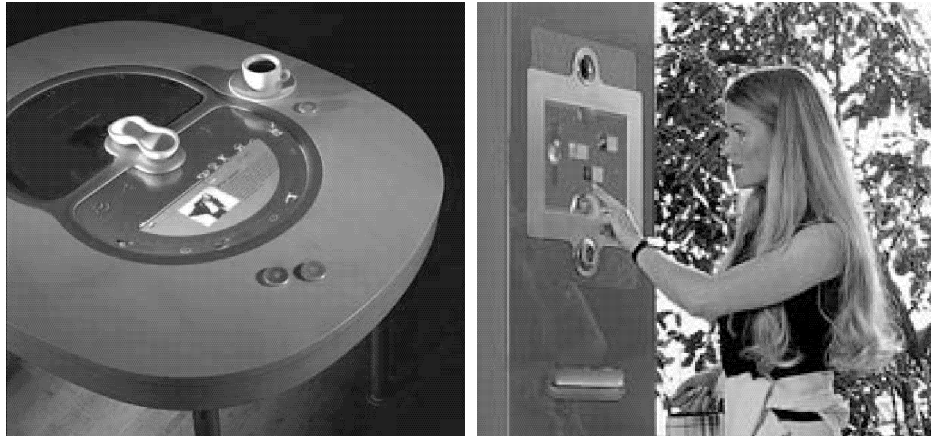
**Figure 12** An interactive *LIME* cafe table and public screen. Photos by Royal Philips Electronics.

As early as 1997, Philips was involved in a large research project called *LIME* (Living Memory), integrating a local exchange platform into cafe tables and other urban furniture. Following this example, various projects are currently being conducted to further develop the idea of interactive community boards to support information exchange in a local community (Churchill et al., 2003; Koch, 2004).

Junctions, or nodal points, in a city also offer possibilities for people to create and investigate – as well as store and collect – electronic content. Such content could be local news, personal experiences, advice and memories, announcements, invitations, reviews, local advertisements, services and other similar information (Struppek, 2002).

Mobile phones can also be used as transmitters of information. Various artists have rediscovered the concept of urban dialogue in the form of digital speakers' corners and have been experimenting with utilizing SMS for public expression. *Urban_diary* (2001–2) provided space for daily thoughts sent via short message service (SMS) to a screen in a subway station. *Storyboard* (2005) by Stefhan Caddick used a mobile 'Variable Message Sign' to display submitted SMS text, situated in public spaces. Will the next step be to connect the blogosphere with Urban Screens? What strategies will prevent misuse and encourage high-quality submissions?

## THE INTERNET AS A DELIVERY MECHANISM FOR INHABITING URBAN SPACES

Employing a moderated platform, the project *React* (2005) used the large screen at the Sony Center, Berlin, to engage four authors in a discourse with an urban audience. In a 3-hour performance, the writers commented on the local space and its people, connected in real time via a web interface to the large screen. The audience could reply to the observations of the hidden writers sitting in the surrounding architecture via SMS comments at the bottom of the screen.
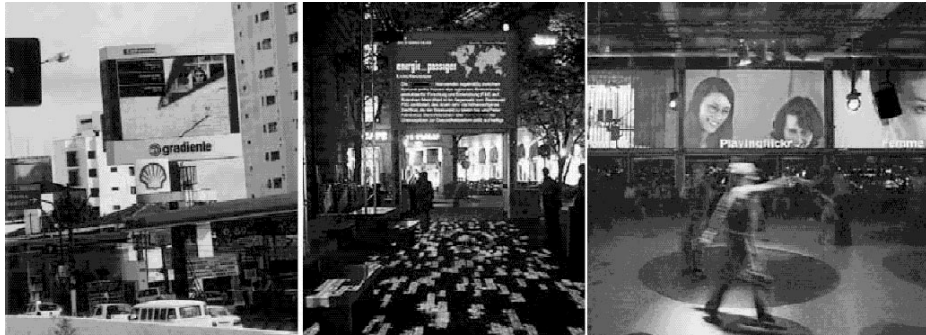
**Figure 13** *Egoscópio*, *Energie Passagen* and *Playing Flickr*. Three projects using the internet as a resouce for generating a visual stream. Photos by Helga Stein (left) and Willem Velthoven (right). Middle photo from project website.

The emergence of the internet culture has brought new ways of participation and exchange to challenge hierarchical authorship. The 'new forms of creation mediated by networks more and more remote, fast and wireless' (Beiguelman, 2006) derived from this culture, influence new productions of public space. Artists are exploring the potential of the growing interconnections between online and offline worlds, and between social experiences in virtual and physical space. Wallace (2003) sees the internet connected to screens 'as a delivery mechanism to inhabit and or change actual urban spaces'. We can find various community experiments in the growing field of social computing: friend-of-a-friend communities; participatory experiments in content creation in the mailing list culture; and more recently, the wiki websites (where users can add and edit content) and blogging systems that serve an increased need for self-expression. By connecting large outdoor screens with digital experiments in online worlds, the culture of collaborative content production and networking can be brought to a wider audience for inspiration and engagement.

*Egoscópio* (2002) invited people to participate in creating the 'anti-biography' of a virtual character through the submission of websites to the screen. Thus emerged 'a character who lived in the boundaries between art, advertising and information, promoting a permanent state of disorientation and hybridism' (Beiguelman, 2006). The project *Energie Passagen* (2004) by Monika Fleischmann and Wolfgang Strauss (2004) used projections of catchwords from online newspaper articles onto the pavement, drawing passers-by into the installations, bringing them into the visualization zone. People could reconnect the catchwords in a new way via a text input device and generate their own alternative online news feeds on a larger screen [www.energiepassagen. de].

*Playing Flickr* b*y* Mediamatic (2005) uses the huge database of shared personal image collections developed on the Flickr internet site; each image is marked with a specifying tag to control the image projections, and the audience can send words via SMS to trigger the search for images.
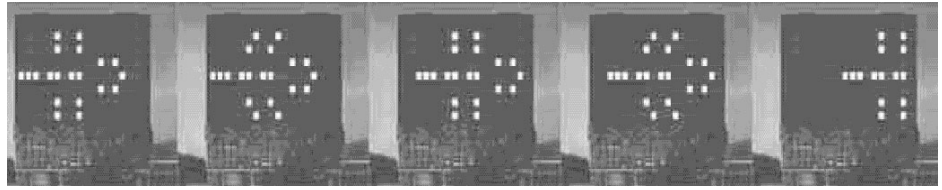
Figure 14  **Animation by Susanne Schuricht for the project Blinkenlights.**

One of the most beautiful examples of how participation via the internet could create a dynamic which challenges the creativity, especially of young people, is the project *Blinkenlights* (Berlin, 2001–2). This project was an experience that still lingers in people's memories. The Chaos Computer Club used an empty building at Alexanderplatz (the central plaza in East Berlin) and transformed it into a giant pixel screen, simply by connecting the lights installed in a window to a central computer system. Via a simple interface with the internet, people could create their own animations and send them to the screen, or even play the computer game 'pong' on the screen. A special feature was love letters, self-made animations that you could trigger via mobile phone while standing in front of the screen. The mobile phone became a remote control for engagement with the surrounding architecture.

The project *Stalk Show* (2004–5) in combination with its predecessor *Agora Phobia* (digitalis) (2000–4) uses the internet for a serious purpose, as a medium for giving isolated minorities access to participation in the development of the public sphere and life in urban spaces. Its urban audience took part by using an interactive backpack touch screen carried by the artist. Passers-by could search through a large database of comments written by isolated minorities, while 'being observed' by the connected big screen through an attached webcam, displaying their portrait alongside their comments. The statements from isolated minorities about the threat of insecurity and lonliness, and about their personal strategies for coping with social spaces were derived from the installation *Agora Phobia* (digitalis). In an inflatable 'solation pillar' situated in a public space with a computer attached, passers-by were invited to chat with people who were isolated and feeling like prisoners, nuns, asylum seekers, or 'digipersonas'.

## NEW EXPERIMENTS IN PARTICIPATORY PLANNING

Jeanne van Heeswijks and the group Superflex went a step further, involving the urban audience in experiments with participatory planning. Superflex envisioned using a large outdoor screen to bring their collaborative internet experiment called *Supercity – Karlskrona2 and Wolfsburg2* (1999–2002) to the urban community. The aim was to connect the 3-D virtual copy of the cities of Karlskrona and Wolfsburg with their originals. While the virtual model allowed the citizens to play at home with the new vision of their hometown
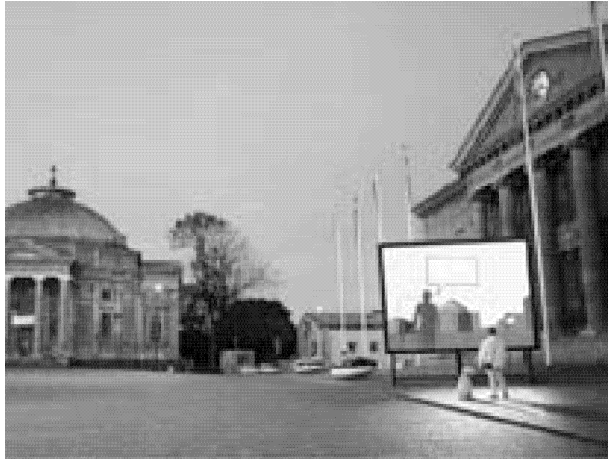
**Figure 15** The city of Karlskrona encountering its virtual copy [Superflex/Supercity/Karlskrona 2].

and meet as virtual decision makers to discuss the process of urban development, the screen invited the urban audience to follow the negotiations and bring to life their role as citizens.

Similarly, in Jeanne van Heeswijks' project *Face Your World* (Columbus, OH, 2002), children in a special bus were given access to a multi-user computer game to redesign their communities as they envisaged them. The children's creations were displayed on special screen sculptures at three bus stops presenting the results proudly to the urban community. 'It's about the way people look at the space around them. With everything being privatized now, people don't view the community as their own any more' (Gentile, 2002). Digital media were utilized here as interaction catalysts for the participation and engagement of young people in their local community.



**Figure 16** Children redesign their communities in the *Face Your World* project using computer screens on the project bus (left) for display at three bus stop screens (right).

Locative Media is a current rapidly developing field of interest, using the possibility of localizing data and connecting them invisibly with city space via a global positioning system (GPS). The project *PDPal* uses a digital billboard for a glimpse into the invisible data world, leading to a deeper level should the user decide to follow. *PDPal* experiments with mapping the area and creating a dynamic portrait of personal urban experience around Times Square, New York, mapping information onto the location. Mobile and networked platforms are used as a mediating and recording device.

However, whichever medium we use to go into the city's public space, we must face up to the responsibility of sustaining our urban society. The outer public space is the glue that holds the urban society together. It is time to shape the future development of the 'screens world' in a sustainable manner. Moving away from the focus on technology, we need to develop more creative visions of alternative socially oriented content for various types of Urban Screens. Ideas need to be shared before technology makes it possible to cover buildings with large flexible planes of moving images, networked and controlled from one central location but making use of site-specific collected consumer data. Forces other than commercial interests need to urgently lay claim to shaping the future development of the emergent 'screen world' in which complex display systems are currently detecting our behaviour and adjusting to our consumer preferences. It is a great challenge to broaden the use of these 'moving billboards', as Lev Manovich (2002) calls them in his vision of augmented space.

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*Egoscópio* (São Paulo, 2002) by Giselle Beiguelman, URL (consulted February, 2006): http://www.desvirtual.com/egoscopio

*Energie Passagen* (Munich, 2004) by Monika Fleischmann and Wolfgang Strauss, URL (consulted January, 2006): http://www.energie-passagen.de

*Face Your World* (Columbus, OH, 2002) by Jeanne van Heeswijk, URL (consulted January, 2006): http://www.jeanneworks.net/, http://www.faceyourworld.net

*Hole in Space* (Los Angeles/New York, 1980) by Kit Galloway and Sherrie Rabinowitz, URL (consulted January, 2006): http://www.ecafe.com/getty/HIS/

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*Walk This Way* (New York, 2001) by Perry Bard, URL (consulted January, 2006): http://www.perrybard.net/pubartpg.html, http://www.design. philips.com/about/design/section-13506/

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## BIOGRAPHICAL NOTE

MIRJAM STRUPPEK is an urbanist, consultant and researcher in Berlin, currently working on URBAN SCREENS in collaboration with the Institute of Network Cultures, Amsterdam: a series of conferences, an exhibition and an online information and exchange platform researching the potential of outdoor screens for urban society. Since 2005, she has organized the monthly Urban Media Salon in Berlin. After working for a year at PLAY_gallery for still and motion pictures, Berlin, she founded her own company Urban Research, Berlin in 2004. In 2002, she developed the information platform interactionfield.de, presenting new interaction elements for urban public spaces.

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