

Navigating E-culture

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VIRTUEEL PLATFORM

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Introduction:

One of the key aims of Virtueel Platform in the coming years is to analyse and evaluate the ways in which e-culture manifests itself in the broader arts and cultural sector in the Netherlands, and to create more chances for such crossovers to take place. In the current publication we selected two fields in which e-culture is challenging the traditional ways we experience culture, public space and technology we carry around with us every day. This selection came about in part due to the events Virtueel Platform itself organised over the past year. A series of workshops and expert meetings were held that examined ways in which e-culture is developing within the broader cultural sector in this country. In order to do so we looked further afield, to Europe but also to the US and Australia, in search of good practice.

One of the key cultural sectors to work with new media in recent years has been the heritage sector. Both at national and European level huge investments have been made in digitising our cultural heritage. But what is being done with it? In the midst of discussions about the future of the Internet, the semantic web, as well as myriad new technologies, we found it interesting to look at the situation of museums as key nodes of cultural content, and how they are dealing with their new role in relation to new technology. Dutch museums have begun to realise the potential of the web and are looking to international good practice. We invited a number of key international experts on the social web and museums to comment on their view of the state of play and offer some insights in to how to implement the web in heritage institutions. Many of the lessons learned can be applied to other arts disciplines or parts of the cultural sector.

This book begins, however, with an examination of how electronic culture pervades the space around us. How will we experience culture in the years to come – via huge screens in public spaces, or on very much smaller screens on new generations of handheld devices? What will this mean for the way we experience it and how will it affect the kind of content that is to be found there and the format in which it is presented? In its new role as sector institute, Virtueel Platform is primarily focused on the meta-level of investigation: what can be learned from projects or new methodologies that are taking place and how can they be translated to the Dutch context? We take a long-term view,

in the sense that we are particularly interested in sustainability and professional development of the e-culture sector, and we hope with these examples to broaden the perspective of work that is being carried out across the cultural sector now.

Cathy Brickwood

Virtueel Platform

Cathy Brickwood is programme manager at Virtueel Platform. Until April 2008 she was director and has worked for the organisation since 1997, where she was responsible for events such as the E-culture fair and publications including *New Media Culture in Europe: from Practice to Policy*. She is currently responsible for projects around digital media use in the cultural sector as a whole as well as editorial projects.

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Locative Media and Public Screens (Part One)

CasZuidas – Aïcha Hamu – *The Love and Terror Cult*
(France, 2007)



CasZuidas – Nicole Tran Ba Vang – *Strip Tease*



Introduction:

Art Mediated by Technology

Artists commonly draw on popular technologies like video, photo cameras, games, mobile phones, GPS systems, etc. for their projects, either as tools or as a means of commenting on something. All these consumer goods, so called 'informal media', are replacing the traditional artist's palette. Today information technologies play a large role in the whole chain of artistic production and distribution. The rise and popularity of Web 2.0 with its famous 'Do-it-yourself tools' have shifted the power to the user, bringing about innovative forms of media use in which an open and playful collaboration can potentially lead to critical positions and new ideas. Sites such as YouTube, Flickr and MySpace, where users can freely participate, upload and broadcast their own material, are the most famous examples of the success of Web 2.0.

One of the results is that traditional arts institutions no longer have a monopoly on the dissemination of contemporary visual culture. The new forms of communication in the public sphere have created new modes of social and political in- and exclusion. At the same time, though, new patterns of information exchange and social networks have begun to emerge. Some have hailed the emergence of new technologies and platforms as revolutionary and emancipatory and yet these great expectations may be in need of a reality check.

Urgent questions are arising relating to what these changes mean for our social relations, how we communicate, our relation to the space around us (both the public as well as the private space), and of course to the image we create of ourselves. The fact that changes in artistic practice are happening simultaneously with the development and rise of online communities challenges artists to search for a new approach that crosses disciplines and borders. It has already led to new forms of presentation, distribution and documentation of works. It is the task of both artists and curators, as mediators, to open up and break open space for discussion; think of hacking, infiltrating and showing different possibilities to deal and relate to standardised systems. However, the cases are few and far between of these developments being picked up and reflected upon by museums, curators and critics. One of the reasons for this is the lack of knowledge of the medium and its usage.

In an attempt to close this gap in the Spring of 2008 Virtueel Platform organised the expert meeting *Art Mediated by Technology* around the use and implementation of locative media and urban screens for the museum and heritage sector.¹ The meeting drew upon previous events and projects involving artists using locative media (including Valentina Nisi, Christiaan Nold, Esther Polak). The meeting aimed to explore the possibilities of presenting visual works in public space and to come up with a best practice for the realisation of these projects. The focus was on the small screen of the mobile phone or digital camera (as is used in many locative projects) as well as on the large urban screens (the moving and sometimes interactive billboards that are increasingly popping up in the urban landscape). Six case studies were selected that were in various phases of development. Both positive and negative aspects of presenting art in the new environments were discussed within the different phases of the projects.

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<http://www.virtueelplatform.nl/amt>

The outcomes resulted in three specific issues that always need to be addressed when starting a project on screens in urban space: context, medium and content. First of all, the relation between the public, the location and the project should always be taken into consideration: what is the importance of the context? Secondly, the goal and the target group need to be well defined and researched, before a medium is chosen: what is the extra value of using technology? And finally work 'bottom up' instead of top down'. False assumptions are often made about the audience in terms of their knowledge and expertise, as well as in regard to expectations or willingness to participate.

Challenges that came up in most of the discussions were formulated around the following issues:

Location: how do you deal with different locations – not everything can be controlled.

Participation: is the public interested and open to interact with others?

Technology: the expectation of the public is higher than the technological possibilities. How do you prevent disappointment?

Translation: how do you evolve from a small audience of experts to a broader public?

Annet Dekker is programme manager at Virtueel Platform. Subjects of interest are the influence of new media, science and popular culture on art and vice versa. For the past eight years she was head of exhibition & education and managed the artist in residence program at the Netherlands Media Art Institute in Amsterdam. Next to her activities at Virtueel Platform she is an independent curator and is studying for a PhD at the Cultural Studies department of Goldsmiths College in London, under supervision of Matthew Fuller.

Effect: how can you measure the effect of the project?

Scaling: what are ways to enlarge the project, to professionalise?

And finally a need for progress and sustainability was captured in a list of wishes:

Knowledge: more knowledge and information exchange – start a collection and overview of 'good practices'.

Sustainability: strive for sustainable models for production, technology, presentation and documentation.

Acknowledgement: the new possibilities on offer can change the definition of the museum.

Financing: realisation of a funding body that ensures technical development (production), content, sustainability (by development) and presentation (exploitation).

In this first section Teresa Dillon (co-founder Polar Produce) and Mirjam Struppek (President of the International Urban Screens Associations) reflect on locative media practices and urban screens. From a transdisciplinary practice that is informed by a psychological and sociocultural view, Dillon has a special interest into how we map particular locations, the knowledges that humans call upon to make meaning and the delicate tensions evoked within and between different systems. Her article sheds light on the phenomenon of locative media. Struppek organised the Urban Screen conference in 2004 in Amsterdam and 2008 in Melbourne. In her article Struppek investigates how the growing infrastructure of dynamic digital displays in urban space, currently dominated by commercial forces, can be utilised and broadened with cultural content. The Urban Screens research project aims to network and sensitise engaged parties for possibilities of using the digital infrastructure for contributing to a lively urban society.

Annet Dekker

Virtueel Platform



VFC in de Balie – Video by Sharam Enthekabi



Pleinmuseum - WVUEDUGWODP?
Expect Poison from Standing Water IV,
Peter Missotten



Neude, Utrecht



Trading Mercator Stories (2007)



Urban Screens – The Urbane Potential of Public Screens for Interaction

Mirjam Struppek

<http://www.interactionfield.de>
<http://www.urbanscreens.org>

Mirjam Struppek works as urbanist, researcher and consultant in Berlin. With a background in Urban- and Environmental Planning, she has lectured and published essays with a special focus on the livability of urban space, public sphere and its transformation and acquisition through new media. Since 2005 she has organised the monthly lecture and discussion evening 'Urban Media Salon'. She developed the first international conference Urban Screens in 2005 and is currently working on further implementing this concept of utilising outdoor screens for a sustainable urban society. She is President of the newly formed International Urban Screens Association (IUSA).

The redefinition of a growing infrastructure

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.¹

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 mobilisation of digital technology and a growing digital culture have changed the urban communication environment. In the context of the rapidly evolving commercial information sphere of our cities, various new digital display technologies are being introduced into the urban landscape: daylight compatible LED billboards, plasma screens exposed in shop windows, beamboards, information displays in public transport systems, electronic city information terminals, holographic screen projections, or dynamic and intelligent surfaces, integrated into architectural façade structures.

As McQuire has put it, 'The migration of electronic screens into the external cityscape has become one of the most visible

¹ W. Christ, 'Public versus private Space', IRS international symposium, *Die europäische Stadt – ein auslaufendes Modell?* (Erkner bei Berlin, Germany, March 2000).

² S. McQuire, 'The Politics of Public Space in the Media City'. *Urban Screens: Discovering the potential of outdoor screens for urban society, First Monday Special Issue #4* (February 2006), <http://www.firstmonday.org>.

³ L. Manovich, 'The Poetics of Augmented Space' (2002), http://www.manovich.net/DOCS/augmented_spac_e.doc.

⁴ P. Virilio, 'We may be entering an electronic gothic era'. *Architectural Design – Architects in Cyberspace II, Vol. 68 No. 11/12* (Nov. / Dec. 1998), pp. 61-65.

⁵ For a list of artistic screening events and initiatives see <http://www.urbanscreens.org>.

tendencies of contemporary urbanism'.² Considering this already existing digital infrastructure, it is a great challenge to broaden the use of these 'moving billboards', as Lev Manovich calls them in his vision of an Augmented Space,³ instead of flooding urban space with new techno-objects.

So far one of the main targets of this infrastructure is to manage and control consumer behaviour. We are not far away from the implementation of technology that 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-specifically collected consumer data. Display systems already start to detect our behaviour and adjust to our consumer preferences.

Paul Virillio sees the new, developing 'pervasive architecture-style' of screens covering high-rise-façades as 'Electronic Gothic'.⁴ He refers to the narratives of Gothic church windows, which were aimed at affecting people's moral behaviour. Immersion and its effects on the audience will also be increased by the 'perfect' incorporation of screens in the architecture of the urban landscape.

How can the use of these screens controlled by market forces be broadened and culturally curated? Initiatives such as Locomotion, Going Underground, Strictly Public, Outvideo, the 59th Minute and Transmedia :29:59⁵ are pioneering in their use of commercial outdoor displays for screenings of video art. New balanced alliances are needed that challenge city authorities and regulators, architects, advertisers and broadcasters, as well as cultural curators, artists, and the citizen as producer – joint co-operations to shape the future development of the 'screen world' in a sustainable manner, considering the danger of visual and technological pollution of urban space.

The broader context of urban screens

Urban public space – understood as open, civic space – is a key element in the development of European urbanism. In this role as a space for representation, culture, and encounter through trade, exchange and discussion, urban areas have always been a place that is rendered alive through various interactions. Referring back to the old concept of the Greek agora, urban public space is a unique arena for exchange of rituals and communication. A constant process of renewal and negotiation challenges the development of urban society. The architectural dimension of urban space has played an important role in providing a stage for these interactions. Moreover, the architecture itself functions as a medium, telling narratives about the city, its people, and the represented structure of society. Its inhabitants can read the re-occurring social interactions and the way the space is populated in a participatory

process. The whole urban structure is becoming the crystallisation of the city's memory over time.

Yet, the vanishing role of public space as a place for social and symbolic confrontation and discourse has been much discussed in urban sociology over the last century. Sennett, Häussermann, and Bott, in particular, have pointed out how, since modernisation, individualisation and a growing independence from place and time seem to have destroyed the old rhythms of the city and therefore its social systems. We currently face a transitional period of the restructuring of social networks and discover new relations among people and places in a globalised world that is threatened by diffuse and complex fears of instability and lack of strong local roots. This situation has resulted in various experiments with new types of relations, supported by developing new media tools.

In its early stages, the Internet was discovered as new, alternative public sphere. The rediscovery of a civic society is tied to the inherent structure of the Internet, which is strongly based on cooperative exchange and shared engagement through the openness of systems. The population of virtual spaces – virtual cities with their chat rooms, MUDs, and experimental spaces for creating alternative identities – has been continuously growing. Now we are looking at various experiments with community in the growing field of social computing – peer-to-peer networks, friend-of-a-friend communities such as Orkut or Friendster, and, more recently, mobile communities connecting mobile phone users. We also find participatory experiments in content creation within the mailinglist culture and wiki and blogging systems, serving an increased need for self-expression. Now these explorations of virtual worlds have merged with the rediscovery of urban public space, the recent popularity of locative media being one indicator of this development.

In parallel, an 'event culture' has evolved in the real urban space. Guy Debord already foresaw 'the society of the spectacle' in 1967, and his critique of a society 'in which the individuals consume a world fabricated by others rather than producing one of their own, organized around the consumption of images, commodities, and staged events'⁶ should be taken seriously. In the growing international competition among cities, the focus often is on tourism or the citizen as consumer. City marketing and urban management strategies are applied to create a vision of 'creative cities' that are in fact not necessarily supporting the inhabitants' creative use of the city or their creative contribution to a lively urban culture. Cities are engaged in a struggle with a 'feeling of placelessness' caused by the spread of international architecture and branded shops. In fact, screens also tend to look the same everywhere, so there is a need to consider the locality as well as site-specificity of the content in order to

⁶
S. Best, D. Kellner,
The Postmodern Turn.
New York: Guilford
Press, 1997, p. 82.

prevent further disconnection of the perception of our urban space from the actual locality.

In order to maintain the social sustainability of our cities, it is important to take a closer look at the liveability and use of urban public space and the rediscovery of a civic society. The information platform www.interactionfield.de gives an overview of numerous interactive media projects, assessing their potential for urban society in terms of:

- Promoting interaction, fearless confrontation and contact with strangers;
- Promoting formation of public sphere by criticism, reflection on society;
- Promoting social interaction and integration in the local neighbourhood;
- Supporting understanding of the current development of our high-tech society;
- Supporting conscious participation in the creation of public space.⁷

⁷
For a detailed
description of these
developed categories
see <http://www.interactionfield.de>.

Urban Screens can be understood in the context of a reinvention of the public sphere and the urban character of cities, based on a well-balanced mix of functions and the idea of the inhabitant as active citizen instead of properly behaving consumer. Virtual spaces alone cannot function as spaces for exchange and production of identity.

The character of urban screens

In connection with the ephemeral yet open character of the digital information world, Urban Screens asks for a new urban language with its own dynamic signs and symbols, formed through active participation from various players. New interactive technologies and networked media offer more possibilities for the visual programming of these digital surfaces through the interplay of new display technologies, broadcasting tools, database and content management systems, and sensor technology.

Through the Internet and other digital networks, digital content has become more fluid, being, at least in theory, available anytime, anywhere, produced for the audience of the new global village. Could large outdoor displays function as experimental 'visualisation zones' of a fusion of virtual public spaces and our real world? Can we localise the huge flows of information through these screens, and can these zones in fact play a more active role, more active than just providing the canvas on which the digital world is rendered? What characterises Urban Screens is a connection to the locality of the static nature of the new screening infrastructure.

In contrast to the mobile screens integrated in phones, PDAs, laptops etc., which display content for an individual, Urban Screens focuses on the public urban audience, on joint and widespread reception of media content. The growing embeddedness in screen systems, accessibility of information via Internet, mobile devices, etc. augments the respective urban space's 'situatedness'. Levels of locality and globality vary, ranging from the local neighbourhood screens with symbols and signs on a city level to trans-urban networks of screens enabling new 'glocal' interconnectivity.

Visions of new content and use

The first steps in broadening the commercial advertisement content of large digital outdoor screens focused on the transfer and slight adjustment of TV features to the new circumstances of public viewing. Soon we might have TV broadcast stations specialised in urban public space and its local community. The experiments done by BBC in collaboration with Philips and local City Councils in various cities in the UK could be considered a forerunner to these TV broadcast stations. They coordinated outdoor movie-screenings, the collective watching of soccer-games, and special City-TV news channels. Preferably set up in key locations, in a setting for a wider audience, these screenings in memorable places could support identification with local culture through joint experiences. A local memory could indeed develop, if the screens were used as a means for maintaining and supporting a rich and complex local culture.

There has been a growing interest in connecting screening infrastructure with cultural institutions that preserve and produce digital content or video art. Cultural centres and institutions such as the Schaulager in Basel and Austria's Kunsthaus Graz have started, in a more experimental style, to officially integrate screens in their architectural façades, so that they function as an extension of their archives into public space. The Australian Centre for the Moving Image uses the nearby public screen in Federation Square, Melbourne. 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 in its complex of buildings to address different audiences. One of the screens will be used to support the development of a new local community in the vicinity. The above mentioned BBC project of Public Space Broadcasting on community screens collaborates extensively with local art institutions.

A new audience can be reached on their daily routes by bringing content into outdoor public space. Connecting Urban Screens amongst each other could enable new mechanisms for creating

and maintaining relationships between cross-cultural organisations and their audiences. Connected screens could also serve as exchange platform between the inhabitants of various cities. A repeatedly suggested idea for using these screens is to enhance the connectivity of remote communities through shared visual displays that utilise videoconferencing. These connections between remote spaces reflect the relativity of the terms 'close' and 'remote' in a globalized world and an increasingly transnational lifestyle. Screens become a key element in the government, regional, and urban informational infrastructure due to their ability to easily convey and spread content in local spaces.

The appeal of a local environment obviously is a highly subjective matter, but a sophisticated social interaction and information network in a local neighbourhood could play an important role in the perception of locality, supporting a feeling of security. By connecting large outdoor screens with experiments in online worlds, the culture of collaborative content production and networking could be brought to a wider audience and serve as an inspiration.

Interactive screens integrated into urban furniture similar to a blackboard for comments, stories, conversations, could also help to circulate and access data, serving and strengthening the local community and its small-scale economy.

As early as 1997 Philips was involved in a large research project called *LIME* (Living Memory), which integrated a local exchange platform into café tables and other urban furniture. Following this early example, various projects aimed at further developing the idea of interactive community boards and supporting the information exchange in a local community are currently being produced.⁸

In an attempt to address issues of fear in urban spaces, Rude Architecture implemented a network of Chat Stops equipped with interactive video technology, enabling communication between people waiting at different bus stops. If they desired, people could start a 'video conference' with others waiting somewhere else. By means of communication with other inhabitants, the boredom of waiting could be alleviated through conversations, and subjective feelings of safety could potentially be increased. The project applies video communication instead of video surveillance – voluntarily and transparent, but at the same time entertaining.

The mobile phone can also be utilised as information transmitter. Various artists have rediscovered the idea of the urban dialogue in the form of speaker's corners and have been experimenting with the use of SMS for public expression.

8
E. Churchill et al.
'Multimedia fliers:
information sharing
with digital community
bulletin boards'.
Huysman, Marleen et
al. (eds.) *Communities
and Technologies*.
Deventer: Kluwer, B.V.,
2003, pp. 97-117.



Federation Square, Melbourne (October 2008)



Federation Square, Melbourne (October 2008), work by Igor Stromajer for Visual Foreign Correspondents



(Left) Shanghai (December 2008)

The project *Storyboard* by Stefan Caddick used a mobile Variable Message Sign situated in public space to display submitted SMS text. Will the next step be to connect the 'blogosphere' to Urban Screens? What strategies will prevent misuse and encourage high-quality submissions?

Involving an urban audience in experiments requiring participatory planning and making use of the participatory tools of new media is a great challenge. Screens in public spaces could function as mediation board between the community and the local planning department and serve as a public display for the exchange of ideas.

Conclusion

Content needs to be coordinated with new visions of how, when, and in what specific locations screens can be integrated in the urban landscape and its architecture. The balance between content, location, and type of screen determines the success of the interaction with the audience and prevents noise and visual pollution. Furthermore, we need to understand how the growing infrastructure of digital displays influences the perception of our public spaces' visual sphere.

Whenever we integrate a medium into the city's public space, we need to assume responsibilities regarding the sustainability of our urban society. Public space is the glue that holds urban society together. It is time to shape future directions of the developing 'screen world' in a sustainable manner. It is time to develop more creative visions for alternative, socially oriented content for various types of Urban Screens and to avoid a focus on technology. Other forces than merely commercial interests should drive the attempt to shape the future development of the emergent 'screen world'.⁹

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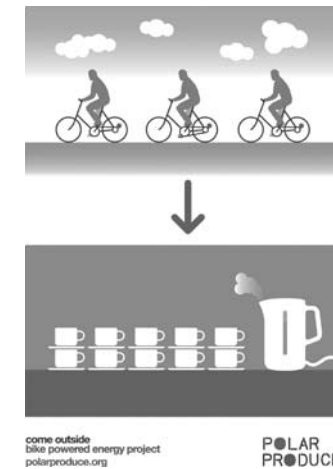
For a detailed article presenting various Urban Screens projects, see M. Struppek, 'The social potential of Urban Screens'. *Screens and the Social Landscape, Visual Communication, Vol. 5, No. 2* (Sage Publications, June 2006), pp. 173-188.

...It's All About the Position, Baby!

Teresa Dillon

<http://www.polarproduce.org>
<http://www.newinterfaces.net>
<http://www.offloadfestival.org>
<http://www.1um1.net>

Teresa Dillon is an intermedia artist, producer and director. Her work focuses on the human-environment relations that emerge within specific locations and which give rise to meaning, communication and expression. Since 1999 her work has been shown internationally at various festivals (Pixelache, Enter, Infr'raction) and conferences (NIME, Earli, ISCAR) and she is director of the UK-based arts collective Polar Produce. In 2007, she set up N.I.P. – New Interfaces for Performance, a distributed research and touring network of media artists from across Europe. She directs the UM Intermedia Festival, Lisbon, Portugal and the OFFLOAD-Systems for Survival art-research programme. Alongside her arts practice, she also works as an independent consultant and freelance producer/researcher (e.g. BBC) and lectures and supervises students on the Arts, Culture and Education, MA, Cambridge University. She holds a PhD from The Open University and has published international on various topics including creative collaboration, open source, educational design and location media.



Flyer from *Come Outside*, Polar Produce (2007)

Introduction

Key themes within my work have been human-environment interrelations, location, context, creativity, consumption, and production and survival. My transdisciplinary practice is strongly informed by a psychological, sociocultural view. This perspective emphasises how through the active participation in our environments, our thinking, communication and behaviour is transformed and reorganised. Consequently we are inseparable from our environments as they fundamentally influence our identity by providing and limiting the conditions for action. Therefore when I speak of location and when I consider what it means to create and produce location and context aware works, I take this position into account. It is a viewpoint that in my view complements the original vision of pervasive and ubiquitous technology, of which location-based experiences are a component.

Calm technologies

The terms *pervasive* and *ubiquitous* are often used interchangeably but they do refer to different forms of computing. *Ubiquitous* computing is best considered as the underlying framework, the embedded systems and networks, which are invisible and everywhere, but allow us to plug-and-play (e.g. Internet protocols etc.). It is the method by which computers are made available throughout the physical environment but invisible to the user. Pervasive computing, on the other hand, refers to the tools, which allow access to this ubiquitous framework, enabling us to retrieve information anytime, anywhere. These devices are often location and context aware; allowing us to push and pull content to a particular position e.g. GPS enabled hand-held devices (mobile phones, palmtop computers etc). Other technologies, which are context aware but may not necessarily pinpoint an exact location, can pick up environmental or object information, e.g. tag and sensor technologies. These location-based media tools are part of a wider body of ubiquitous and pervasive devices and systems which 'extend digital media out into the physical world' (Benford, 2005) allowing it to be available for pick up and transmission anytime, anywhere.

One of the key visionaries of ubiquitous computing Mark Weiser (1952-1999) considered this form of computing to be the 'third wave', where the invisibility of the devices and infrastructures allowed for greater focus on the content and meaning of the interaction.

'The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it' (Weiser, 1991, 1).

This 'third wave' moves away from clunky mainframes and large-scale desktops computers of past years to what Weiser envisaged as 'calm technologies' (1988) and what in part inspired Ishii & Ullmer (1997) to research and create work which closer merged the world of 'bits' (computers) and 'atoms' (physical reality). Calm technologies are similar to what has also been called seamless technologies in that they do not intrude on your consciousness, allowing you to focus on the task, not the tool.

Challenges

However our current state of play is far from the seamless reality that Weiser envisaged. The following section summarises some of the main issues facing location-based experiences today.

Content

CONTENT APPROPRIATENESS AND USER PARTICIPATION

Users need to feel the content is relevant to them and their current location. If they are adding content they need to be able to recognise their own contribution and position within the mass of content generated, this is what will motivate their continued participation, or even increase it.

REAL-TIME CONTENT AUTHORING

When delivering location-based experiences it is necessary to be able to respond immediately to users' input. This requires author-tools, which can deal with such inputs as well as aggregate other users inputs, location information and so forth. The richer the aggregation the more opportunities there are for complex narratives and interaction to emerge.

CONTENT MANAGEMENT AND MODERATION

Especially when dealing with user-generated content requires support and filtering and is often a costly legacy of a project, particularly when dealing with content generated by young people and minors, which maybe sensitive.

DIGITAL RIGHTS MANAGEMENT

For the most copyright laws are not appropriate for the digital age and alternatives such as the Creative Commons need to be better understood and/or other alternatives created.

JOINED UP CULTURAL CONTRACTS

Between institutions in the cultural, heritage, broadcasting, publishing etc. sectors so that there are more supportive arrangements for content usage (image, archival material etc) on a national and international level.

APPROPRIATE AGGREGATION AND DATA MINING TOOLS

Content is becoming increasingly digital and atomised. People now search the web fluidly, searching and combining different information streams. With the continued growth of online digital and cultural artefacts and the concept of locative, anytime, anywhere data, people need to be able to make meaningful links between content and objects. Investment in researching and developing new aggregation tools particularly within relation to the arts, culture and heritage sector, is essential.

Devices

SCREEN SIZES AND QUALITY OF PROJECTION SURFACES

Many location based devices require mobile or palmtop computers to deliver the content. However, when working outside, these screens are not usually responsive to natural light and varying weather convictions. Also for increased mobility screens need to be more fluid and adaptable to varying locations.

POWER SUPPLIES AND BATTERY MINIATURISATION AND LIFE-SPACE

This is a key issue in relation to wireless sensing technologies where the networks are scattered and distributed over a large area. This calls for small devices and batteries that have longevity or sustainable power sources. Much research is currently being conducted in this area.

Networks and infrastructure

DIFFERING NETWORK AND DEVICE PROTOCOLS

For experiences to be seamless, they require users to be able to connect without problems to any given network and start to play. Currently there are few network standards and there are many differences between network providers and device protocols, which currently hinders such seamless fluidity.

DOWNLOADING CONTENT TO DEVICES

Similar to above many location-based experiences require users to download content to their phones, computers etc. Problems can occur when the devices are incompatible or do not have the correct programmes installed or guidelines to support the download.

AD HOC NETWORK CONNECTIONS ESPECIALLY IN GPS AND WIRELESS GREY ZONES

Many location based experiences play with the slippages in network coverage, incorporating it into the dynamics of the experience. However when this is not possible or useful, such issues can seriously disrupt the experience.

SUPPORT COSTS

On-hand support teams can be costly particular when delivering experimental or novel experiences on technology that is emerging or not universally used.

ONLINE PROFILING TECHNIQUES

In some areas of the culture and heritage sector, institutions are finding that they have more online visitors than visitors through their doors. This in itself demands more in-depth knowledge of their online audiences, which consequently impacts on how online, location based resources are designed and developed.

Other: pedagogy, design and ethics

PRIVACY AND ETHICAL ISSUES

For example, personal security, particularly with tracking people and knowing detailed information about the location. This is an issue that is currently not very well understood and can prevent the development and delivery of certain experiences, particularly when working with children and minors.

PEDAGOGICAL AND DESIGN APPROACHES

As the area is still within its infancy there are few approaches or guidelines to creating and designing educational locative experiences, particularly when considering the needs of the cultural sector.

Design dimensions

All the above issues, which are by and large technical and infrastructural, can cause serious interruptions to a location-based experience. This means that if the content is not strong enough to override these issues, audiences tend to drop out or become apathetic. In a recent report by the BBC based on research conducted for the Participate project (Stynes & Woolard, 2006) several design dimensions were identified in relation to location-based experiences. These are summarised below.

GENRE

What kind of experience is it and what kind of dynamics is it modeled on, is it a game, service, community tool, guide to a particular place, a science experiment, tool-kit etc.?

AVAILABILITY

Is the experience transient or permanent?

REPETITION

Is the experience one-off or on-going?

SCALE

How many people can engage with it at one time (10-100s-1000s-100,000+)?

EMERGENCE

Is the content design fixed or is it fluid and emergent?

HOST

Is the experience delivered by a broadcaster (e.g. who delivers the experience, is it the BBC, Google or a small arts company in partnership with a university research lab)?

LEVEL OF TECHNOLOGY

Does the experience use established and universally expected technologies, emerging technologies or specialised devices?

LOCATEDNESS

For example, how important is the location to the experience? Is it high – with a historical site? Medium - can happen in everyone's back garden? Low – located and not critical, such as Flickr photos?

New senses of place

Over the last decade there has been a variety of what has been defined as location and context-aware experiences. In general these experience combine a variety of devices, which either tell us at varying levels something about our place and location. As the area has grown it has drawn not only on the increased usage of mobile telephony but also on developments within Internet technologies, social software (e.g. Flickr¹, Facebook²), augmented and virtual reality and the Geospatial Web (e.g. Mappr³, Plazes⁴) which extends the Internet by combining it with existing location-based practices, where content and data is tagged with geographic metadata.

The majority of the experiences have been developed and designed by one of the following: a) individual artists or researchers b) small, innovative art companies c) research labs working independently or in collaboration. Experiences designed by such groups tend to be experimental, using specialised technologies, and are concerned with the relations of a specific location. They are by and large designed to work as one-off events or a series of events, taking place at festivals, conferences, art events and so forth.

Consequently their reach and capacity is small-medium audiences (ten-hundreds). Examples include: Uncle Roy All Around You⁵ (2003); Murmur⁶ (2003), 'Ere Be Dragons⁷ (2005), Savannah⁸ (2004), Queen Square Riots/*Riots 1831*⁹ (2004), Measc¹⁰ (2005), We Feel Fine¹¹ (2005), Come Outside¹² (2007).

Secondly, large-scale, location-based experiences and location-based services (LBS's), which involve hundreds-million+ are usually driven by broadcasters, the gaming industry and commercial web companies where the specificity of the location is less important but numbers participating is central. These experiences tend to use more established, robust and universally accepted technologies. Although this is a somewhat crude generalisation it acts as a shorthand for considering some of the design issues necessary to take into account when delivering location-based experiences and the partnerships and technologies that are required. Examples in this area include: iLove-Bees¹³ (2004), Coast Mobile¹⁴ (2005), Google Maps¹⁵ (2005), TomTom¹⁶ (2001, ongoing), Loki¹⁷ (2006, ongoing).

Summarising the influence of both these forms of experiences, Bleecker (2005) considers how this will lead to new metaphors to describing geographic space, what Plant (2004) has referred to as 'reawaking' a sense of geography or as a 'new sense of place' (Williams, Fleuriot, Reid *et al*, 2002), where 'parallel worlds' can co-exist (Reid, Geelhoed, Hull *et al*, 2005).

Constructing new landscapes

Considering this new sense of space and place, what these different forms of location-based projects all tap into is how we fundamentally construct our individual landscape and how this overlaps with others. Dourish (2001) acknowledges how ubiquitous computing has failed to pay full attention to philosophical and social science understandings of how we construct our worlds. From my background as an artist, who also trained as a psychology researcher, Dourish's perspectives ring home. Acknowledging the prior design and infrastructure concerns when creating location-based experience, I now want to focus on this issue of the construction of new forms of human landscape and human-environment relations. This has been sidestepped or neglected in the writings in this area and warrants more attention. The following section attempts to weave together some of the theoretical positions that have informed this question and the work that I have been making.

According to the anthropologist and psychologist Rogoff (1990, 1994) human activity involves the following inseparable planes:

- *Personal* (individual cognition, emotion, values and beliefs)
- *Interpersonal* (communication, role, dialogue, conflict, assistance and assessment)
- *Community* (shared history, values, beliefs, identities, activities)

Similarly, but from a different perspective, sociologist and media theorist, van Loon talks of the rhythms of everyday life:

'...Everyday life thus entails a range of flows, each with their own "proper time" (e.g. duration, pace, frequency). Likewise, we could argue that everyday life consists of a multiplicity of spatializations, including forms of embodiment. If we were to use "space of places", we would have to bear in mind the inherently dynamic, volatile, contested, unstable, and multiplicitous (rather than duplicitous) nature of "place".' (Van Loon 2002, 93)

I draw on these examples from Rogoff and van Loon to highlight how human activity has been observed and analysed via different lenses. As Rogoff notes, in any analysis, it is not possible to account for all planes but what is possible is to foreground one, without losing the inseparability of the others. Weiser, who was heavily influenced by social science methodologies in his approach to computing, also considered a similar approach in his recommendations for designing calm, ubiquitous technology. He addressed the issue in relation to designing technologies, which engage 'both the *center* and the *periphery* of our attention'. The periphery in any given moment is what we are attuned to without attending to it explicitly, yet it can come

to the centre and be crucial to our survival in the next moment. Also, the same physical form can have elements in both the centre and periphery but what is essential to the design of such experiences is that they allow for fluid and easy transition from the periphery of our attention, to the centre, and back. This, according to Weiser is fundamentally calming because by placing information in the periphery, we avoid overburdening our mind and body, so we can focus more effectively on what is in the centre and important. Also by re-centering what was once in the periphery, into the centre, we can take control of it, empowering us to take action, increase our awareness and potential for action. For Weiser, not all technology needs to be calm, as some is designed to stimulate and excite (e.g. games, some forms of film and television), however his point was that too much technology fetishes the object or the tool itself without regarding the context, our position and viewpoint. For me, this latter point is the starting point when designing location-based experiences; as it is from our individual position that we learn how to cope with the world and our existence within it.

Dourish (2001) addresses the question of embodiment, which we could also describe as a form of immersion, denoting not only presence but also participation in the world, real-time and real-space, here and now. For me, this links back to the opening statement I made about the position I take when creating location-based experiences, where the active participation in our environments is what transforms how we think, communicate and interact. This is mediated by rich constitutional relations which are both psychological and symbolic (e.g. language, music) and physical (computers, pens, hammer) in their form. The demands understanding interdependency, interrelations and the slippages between the different planes of activity, rhythms and peripheral and central focuses that people call upon to invoke meaning and create context.

Conclusion: It's all about the position and the extension

In conclusion, if we are to discuss the creation, design and production of context and location aware experiences and to achieve the vision that Weiser, Dourish, Ishii and other leaders in this field envisage then we need too and should be demanding richer and more transdisciplinary approaches. Such an approach needs to take into account how humans construct their worlds and the interrelations within a given context that we call upon to evoke meaning. This I believe to be the starting point when making any location or context aware experience. In this respect, when designing such experiences one has to consider how humans construct their worlds and the *needs* and *motivations* that propel us to extend, align and/or overlap our viewpoints with another to construct new landscapes and senses of place. Location-based technologies provide rich

means for extending our perceptions, in real-time and thereby speed up the potential for extended forms of perception. Consequently, I have begun to think about *designing for extension*. What I mean by this is designing situations which support and allow for *self-exploration, discovery* and the construction of new landscapes, whose borders are not limited by our individual memories or what we immediately see and hear but can be extended through connective technologies that augment and utilise our sensory perceptions, intellect, creativity and curiosity.

This allows for the creation of simultaneously parallel realities, which further reveal our inherent interdependence on each other and our environs. It is a powerful extension of our individual, human landscape and position. Critics could argue that such visions fall into technological and ideological traps but this can be avoided by having a realistic perspective and expectation about what is achievable. Location-based experiences and the devices they employ are part of a long, long history of human tool making, which through time has changed the way we engage with each other and the world. Such changes occur gradually but the basic tool kit is with us now. We have the tools to start making, to start creating. What is necessary then is to consider not only the forms of extension such tools support but what they also limit, what forms of discourse or voices they may privilege and how technological development can be achieved in a sustainable, economic and ecological way.

Teresa Dillon was a keynote speaker at *Art Mediated by Technology*, an expert meeting organised by Virtueel Platform on 29 May 2008. Her presentation can be viewed on the Virtueel Platform website: <http://www.virtueelplatform.nl/page/11852/en>

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Expertmeeting Art Mediated
by Technology (2008)

Endnotes:

- 1
Online photo sharing site
<http://www.flickr.com>.
- 2
Online social friendship network tool
<http://www.facebook.com>.
- 3
<http://stamen.com/projects/mappr>.
- 4
<http://plazes.com>.
- 5
Uncle Roy All Around You (2003) – took the console game out onto the streets. Online Players (using virtual maps) work with Street Players (using handheld computers) to search for Uncle Roy. Webcams, audio and text messages also used to help the players must work together and beat the clock. http://www.blasttheory.co.uk/bt/work_uncleroy.html.
- 6
Murmur (2003) – audio and storytelling project, code mark posted to buildings marking where to access stories via your mobile phone. Originated in Toronto, Canada. <http://murmurtoronto.ca/about.php>.
- 7
'Ere Be Dragons (2005) – pocket PC game, where the virtual landscape created is determined by your heart-beat as you run around the city playing the game.
- 8
Savannah (2004) – a strategy-based adventure game where a virtual space is mapped directly onto a real space. Children 'play' at being lions in a savannah, navigating the augmented environments with a mobile handheld device. <http://www.futurelab.org.uk/showcase/savannah/savannah.htm>.
- 9
Queen Square Riots/Riots 1831! (2004) – a dramatic retelling of the Bristol Riots of 1831 created by actors voices. As audiences walked around the square with their GPS backpack and headphone they could 'hear' the story unfold in the location.
- 10
Measc (2005) – performance installations to use radio frequency identification tags RFID, which allowed participants to trigger multimedia as they walked around an 18th-century museum, which also had actors responding to their actions. <http://www.polarproduce.org/project.php?no=2>.
- 11
We Feel Fine (2005) – blog aggregation tool that searches new blogs entries or occurrences of the phrases 'I feel' and 'I am feeling'. When it finds such a phrase, it records the full sentence and the feelings expressed. <http://www.wefeelfine.org>.
- 12
Come Outside (2007) – participatory bike project. Bikes are augmented with batteries which are charged via pedal powered dynamos. Audience are invited on a 2 mile cycle ride at the end of which the batteries are connected to boil enough water for one-cup of tea. A performance lecture illustrates the consumption and transfer of energy used. <http://www.polarproduce.org/project.php?no=9>.
- 13
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- 14
Coast Mobile (2005).
- 15
Google Maps (2005) – online mapping tool mainly for computer-based use though with a mobile version in beta. <http://www.google.com>.
- 16
TomTom (2001, ongoing) – leading navigation system mainly aimed at car drivers though it can also be used when cycling or walking uses GPS and can be loaded on to mobile phones etc. <http://www.tomtom.com>.
- 17
Loki (2006, ongoing) – Application that sniffs out WiFi connections and triangulates between points to identify a user's physical location and offers location based information for people. <http://www.loki.com>.

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Beyond Physical Space: Three Case Studies

Annet Dekker

<http://www.virtueelplatform.nl>

While the nature of public space has continuously changed throughout history its meaning had remained quite constant – an autonomous zone in which views and opinions could be shared with others. In other words, in public space groups of diverse cultures, lifestyles, and world news meet and exchange knowledge and ideas. At the moment an interesting shift is taking place. The rise of digital technologies has not only changed communication but also our relation to the world around us. Our adoption of electronic sensors, urban screens, CCTV systems and RFID tags has significantly impacted our experience, feeling and use of spatial dimensions, leading to the observation that public space is no longer determined by geographical boundaries.

Many questions arise when we think about our relationship to public space and the changes that have transformed that zone of interaction: What happens when our private life becomes public and we use the public space for our private concerns? What happens to the way we communicate, socialise and relate to each other and to the space around us? What happens when technology becomes ubiquitous but invisible and disappears from our awareness? What happens to our autonomy? Where does agency reside? The impact of electronic devices only begins to address these questions on our experience of location, space and geographical positioning on a personal and global level – an impact that has profound epistemological and ontological implications.

Bursting the bubble

The mobile phone is probably the most interesting example of the changing status of public space. On the one hand advanced mobile phones with integrated MP3 mean we can move through a city with headphones on without getting involved. This phenomenon started in the 1980s with the introduction of the Sony Walkman. Now people from all kinds of backgrounds and generations are distancing themselves from their fellow travellers in trains, buses and on the street. More important is the communication aspect of these mobile devices. The conversations that we make with portable phones epitomise the turn from public space to private space. By holding private conversations and ignoring the people

around them, mobile phone users aid the demise of public space by building their personal bubble. Others refer to the hybridisation of public and private space. Some are even hoping that private conversations might lead to new ways of overcoming difference, when we notice and experience that other people's behaviour reflects our own.

Another tool that changes our connection to the space around us is GPS. For a long time our experience of the city has been influenced by various media, information and communication technologies. But apart from merely walking within a mediated world we are now also actively interacting with the space not through tangible cues but by using various technologies. With the arrival and popularity of location-based technologies a shift occurred from the material cues to immaterial virtual signs by which we navigate the streets. A new hybrid space is formed in which we are constantly moving between the virtual and the actual.

The hype of the Situationists

At the moment many artists working with locative media use the underlying structure and function of the techniques without questioning them. By creating geospatial narratives, games or walks – combining performative strategies with new media technologies – these locative media projects evoke (forgotten) histories and memories rather than enforce actions. While remaining in their own established social networks they at best make social-spatial relations visible. Only very few projects are critically examined and reflected upon: The attitude is 'do-it-yourself' and 'just-do-it'. By merely using the new tools these projects forget that the roots of these technologies derive from military technologies, intended to control and watch others. Some refer to a new Situationist movement, referring to the latter's urban *dérives* (or driftings), asserting that 'locative media finally give us a means to re-discover the city'; in the process omitting that the Situationist movement reacted to a very specific moment, location and place in time which does not translate well to other places in the world. Emma Ota from dis.location put it very clearly: 'Location is not a set of coordinates; it is not something static and easily measurable; it is not a case of physical geography but it is a state which exists through the complex interplay of history, culture, socio-politics, economics and technologies. Location is a multifaceted context, a situation and a state of being and is not necessarily linked to the ground beneath our feet.' In my view many location-based projects are exemplary of our Western, Cartesian way of thinking, and forget to look at other means of 'navigation' and our relation to space/place. This is not to say that contemporary walks need to be political acts, but neither can it be just a matter of turning up and walking around. 'Participation' is something that is inherently connected

with choice, agency and action and these are things that need to be taken into account and reflected upon. At times it seems there is little left but a commodified aesthetics from a control society that has new toys.

A new perception of space

But there are also artists who try to find the opacity in the system. They try to make us see the urban space as it is, laced with visible cues and invisible waves. Moreover these particular projects create a sense of affect rather than just being play or adventure. One example is Yolande Harris' project *Sun Run Sun*, in which she investigates the split between the embodied experience of location and the calculated data of position. Harris questions some of the fundamental issues underlying the 'efficient' and 'functional' GPS data: what is inside and what is outside, what does it mean to be located, what to be lost? Whereas the GPS system negates our relation to the environment, Harris encourages the listener to re-assess and renegotiate their connection with the actual environment. By taking the different data from satellites and translating them into sounds, *Sun Run Sun* delicately treads a path between technical data and actual experience, between the artificial and the natural.

Harris' argument is that the ubiquity of positioning systems, GPS among them, is taking over our ability to perceive spaces and navigate them. By using sound as a vehicle she wants to open that space again. Sound has the ability to open up a subjective dimension, which can free us from the coldness and mechanics of reading digitally generated data – sounds are causing human intimacy. This was also expressed by many of its users. One person said it made her feel small and insignificant, which was a revelation to her. People express that they see and feel the world around them differently, as someone pointed out 'like being on drugs'. Or at the least they experienced a transformation where contemplation took over the otherwise hectic and rushed city life. 'It is like being in a constant conversation with every aspect of my environment, reacting physically to all parts of my surroundings.' Using an intuitive navigator, *Sun Run Sun* provides people with new experiences not just of space but also over body and mind. Affect of place is constituted here through technology. Its relation to the body in movement is what makes its affect felt.

Another example is Esther Polak with the project *Nomadic-MILK*. Polak develops her projects around the notion of space. By using new technologies like GPS and simple robots, her aim is to re-orientate and shift perspectives on the issues of cultural and technological development. As in Harris' project an affect of place is constituted through technology, but whereas Harris' focus is on the individual experience of public space through

live sound translations of satellite movements, Polak concentrates on the process of walking a route emphasising memory and experience. The movement of the individual is tracked by GPS and afterwards shown as a live sand drawing to the person involved. Although the moment of recognition and surprise is quickly followed by stories and happenings en route, Polak's main interest is in the moment of bewilderment and excitement. Affect takes place by revisiting the spatial experience – in the process bringing about a new perception.

Martine Neddham is also interested in evoking new perceptions. She wants to call attention to the way communication produces meaning by analysing the modes of address between the sender and the receiver of a message. Neddham emphasises that the Internet is very much a bodily experience. In her new project *Virtual Person* she combines these different issues. *Virtual Person* is a tool to create fluid relations between text and image. At the moment she is experimenting with touch screens to make that relation more physical. In an attempt to preserve the organic nature of the Internet as well as to confront the user with their own conduct she encourages a playful mixture of expected and unexpected behaviour by creating confusing navigation within the site.

Projects like this create a place for encountering difference and provoke discussion. By emphasising and renegotiating our position with and within our immediate surroundings they provide a space of resonance and meaning. These projects can and are actually addressing the social dimension of human environments and possess qualities that make the communication of interaction visible in the realm of the public/private sphere. Moreover they reflect the essence of what is meant by 'ubiquitous computing' and its affect on the changing relation of the public and the private space. Through artworks like these it will become possible to formulate and discuss our understanding of the specificities of location, which is mediated along political, aesthetic, social and scientific lines. What follows are three interviews with the above-mentioned artists that explore these issues in depth.

A DVD ROM has been made with examples of works by these artists. Documentation is, as every form of representation, arbitrary and incomplete in relation to the original. The documentation of new media art is a particularly demanding field that requires representation of heterogeneous aspects of a particular work – from hardware, software, and network context to human and mechanical, physical and virtual interaction. The examples on the DVD are part of ongoing research that aims to explore requirements for new paradigms and strategies for documenting live, ephemeral and mediated works of art.

Aiming for Dead Reckoning

Yolande Harris

<http://www.yolandeharris.net>

in conversation with
Annet Dekker

Yolande Harris uses sound and image to navigate and explore natural and built environments through scores, maps and instruments. Her work is currently supported by the Netherlands Fonds BKVB and she has been artist-in-residence at STEIM, Academy of Media Arts Cologne, the Jan van Eyck Academy, and the Netherlands Media Art Institute, where she developed Sun Run Sun. Her work has been presented at major venues internationally, including MACBA, V2, NIME, ISEA, Picnic, and UCLA. She is a PhD candidate in composition at the Orpheus Institute, Ghent. Her publications include *Inside-Out Instrument* (2006) and *The Building as Instrument* (2007).

ANNET DEKKER

You studied composing. How did you get involved with digital media?

YOLANDE HARRIS

When I studied musical composition and performance I was interested in sound as a material and in different forms of musical notation. I was also working with ideas of communication through scores and the nature of an absent public in walking and sailing performances. I looked for broader ideas and techniques for composition and began to explore electronics and digital media for manipulating sound and image and the relationship between them. I was experimenting with ways to incorporate electronic and recorded sound and video into a composition so I could perform it in a live setting. This led me to electronic instrument design, learning how to control and design for those elements of sound in real time in a meaningful way.

Another part of my background is in architecture and video. I looked at relations between architecture, moving image and sound, how to describe a space through sound, video and movement, and how to use these as architectural or performance materials. Once these 'immaterial' elements become the main material of my work, other physical descriptions of space tend to fall away leaving only the experience of a space.

Looking back, it's interesting for me to see that my early sailing and walking projects for absent publics, particularly the *Sargasso Sail across the Bermuda Triangle* in 1997, introduced me to practical technologies of navigation and communication



Satellite Sounders (2008)



at sea. I can trace the ideas of sonic navigations in *Sun Run Sun* back to these explorations where technologies have a day-to-day practical consequence. This is how I see digital media in my work, as an integral part of the nature of the work.

AD

You describe your latest project *Sun Run Sun* as follows: '*Sun Run Sun* investigates the split between the embodied experience of location and the calculated data of position. A series of portable personal "instruments", the *Satellite Sounders*, transform satellite data directly into a sonic composition. This composition constantly varies in response to the changing location of the participant as they move through their physical environment. The participant/navigator's experience of their own locational shifts are augmented by corresponding shifts in the electronic soundscape, as it is calculated/performed in real-time and played via headphones. *Sun Run Sun* explores the individual experience of current location technologies through a personal experience of sound. It seeks to (re)establish a sense of personal connected-ness to one's environment, and to (re)negotiate this through an investigation into old, new, future and animal navigation using sound.'

You bring up some very interesting and relevant issues: satellites, composition, navigation, and embodied experience. What was your inspiration to start *Sun Run Sun*?

YH

One of the themes in the project was to look at navigation in terms of what it means to know where you are and what it means to get lost. The very process of navigating used to be done by observation of the environment. These observations have been made redundant now that we have devices that tells us where we are and how to get from one place to another. Many people actually transport themselves from A to B with no idea what or where they're driving through. And when the device breaks down – which it sometimes does – they're lost.

Imagine you're out at sea, out of sight of land, without GPS. You would be navigating by celestial navigation techniques using sextant charts and the stars and observation of the

weather changes. With good technique you would be able to know where you are with reasonable accuracy. Now with GPS, you have constant coverage. You know where you are; you have a constant trace. You don't have to calculate anything or manually plot it on a chart. You have your location so simply. It strikes me that you could ignore those other elements in an extreme feeling of false security, because you 'know' where you are, even far out at sea. So if the GPS loses contact or breaks down, you could be more lost than ever before. There are different ways of knowing, and knowledge of ones environment and the ability to navigate were closely tied together. But consumer GPS technology seems to have split navigation from the environment. It's a complete lostness, a different lostness. The detachment from place, which is provoked by the technology, is very fascinating. I don't think it has actually happened before.

It's very easy just to rely on what is given and people are extremely adaptable, readily absorbing new technologies. I'm sure that GPS in this navigational age has pushed us forward and has enormous potential. But I think at the same time we risk losing a lot of what we already know, compromising a fundamental engagement to our environment. In *Sun Run Sun* I'm working towards a hybrid between these two ways of knowing, between navigation through technology and intuitive embodied navigation – a techno-intuition.

In terms of *Sun Run Sun*, I wanted to look more deeply into landscapes and environments in relation to sound and new technologies. Somehow landscapes and environments were topics hardly discussed in the art or media art world. One of the most prominent things that emerged from my research was the navigation idea; one way of relating to an environment is through navigation. The act of moving through the world includes observation, calculation and technological engagement. Of course, I was looking at maps, charts and notations of sound and landscapes, researching the relationships between scores/musical charts and maps/navigation charts. But visualising the satellite data in an image doesn't have the effect that

I'm trying to reach. It puts you into a viewing mode that sucks you into a space other than the one you're in, you're looking at the GPS screen rather than the physical world around you. The whole point for me is to experience a space that you're submerged in. Images, like maps, translate navigation onto a flat surface, whereas using sound immerses you in the space, a space that's continuously developing.

I think that navigation technologies are provoking a very superficial understanding of environment and movement through space, and in doing so we're losing something specific in our physical and emotional relation to these environments. So I try to push this project in the direction of providing an experience of the physical and data environments that is more intuitive and more directly experienced.

AD

Sun Run Sun consists of several different outputs: a performance, an installation and a walk. Why did you make these different forms of presentation? What is the relation between them?

YH

Sun Run Sun has been an in-depth exploration into various navigation techniques and our relationship to sound and the environment. When navigating we try to locate ourselves by referring to an external source - traditionally a map, recently a GPS device - but ironically a serious sense of dislocation is becoming a common experience. *Sun Run Sun* was an attempt to look into ways of re-locating and re-negotiating our sense of where we are specifically through the use of sound. By using sound rather than image, I hoped to encourage an experience of environment that is more immediate and less referential, more intuitive.

Sun Run Sun covers a conceptual area that is inherently expansive about experiencing and moving through the environment. Rather than confine this area of ideas to one form or medium, the different manifestations of the project allow both me and the audience to explore these experiences from different angles. The pieces are recognisably similar in their sound world and conceptual and technical building blocks. For me it is a challenge to see

how malleable the content is when presented in these different ways. To lead a group of people through a thirty minute performance makes different demands on me as an artist and provides different audience experience than an installation space with a considerably stretched time span or an instrument for a one-person walk. It both forces and enables me to give that content a different space and a different focus.

So the outputs of *Sun Run Sun* have separate names that reflect their specific focuses, but at the same time they feed into each other. For example, my own walks collecting GPS data are reflected in the walking done by the audience when experiencing the *Satellite Sounders*. The installation *Dead Reckoning* functions as the complementary inverse of the *Satellite Sounder* walks. The performances *Amphibian* and *Sun Running* combine my lead as a sonic navigator with an invitation to audience members to create their own live performances by walking. And the talks and lectures provide an opportunity to expand on the background ideas and influences. This synergetic weaving in and out of the different manifestations of the work is a way of encouraging the depth of the ideas behind *Sun Run Sun* to be explored rather than confined. It is also a way to explore the different roles of the audience and the artist, and at the same time to question the 'containers' of installation, performance and walks that are in most cases pre-defined by external factors like institutions, festivals, budgets...

AD

Why did you use the title *Dead Reckoning*, a navigational term, for the installation?

YH

During this project I have researched different historic and contemporary navigation techniques, from coastal navigation, to celestial navigation in open sea, as well as techniques of the Polynesian navigators who use observations of stars and sea state to cover large areas of open water. The title *Sun Run Sun* comes from a celestial technique of observing the sun at noon using the sextant. 'Dead reckoning' is another navigational term and refers to a technique of estimating one's position by

YH

calculating from speed through water, compass direction and any drift factors like tide or wind over a given period of time. I've noticed when sailing out of sight of land, that the boat appears to stay in the center of a circle, always the same distance from the horizon, as if not moving. It is only the sensation of the boat moving through the water and the calculations of navigation that contradict this peculiar feeling of stasis.

Vital for the project is the idea that to determine one's location at a given point, one observes things in motion. I am fascinated that our understanding of position emerges from movement, that a fixed location is established by relating to movement, and therefore that what we take as fixed and immutable is actually malleable and changeable. *Dead Reckoning* demonstrates the calculations of a fixed point by satellites that are in motion. The installation takes live data from a GPS receiver that is fixed in the space, and turns the data of the moving positions of satellites overhead into sound spatialised over six speakers hanging in the otherwise empty space. The stream of live GPS data is projected in black numbers running upwards on the wall between the windows, and reveals the calculation of the GPS as the longitude, latitude and altitude of the space continually change and drift in relation to the satellite data and its errors. The sound environment shows the room floating above the canal in Amsterdam.

And of course, the title *Dead Reckoning* has all sorts of connotations that I liked about negotiating a course between something complete, final and unchanging, and an open, live space of movement and improvisation. I was thinking of it as a complement, the inverse of the *Satellite Sounders* in its form and its way of experiencing the work. There is something about experiencing the *Satellite Sounders* that is about living, you moving...

AD

Yes they seem in some way totally opposite. How do you see this difference in space, in the installation and outside? How do you deal with and experience these different spaces that are related through technical means?

Well, walking with the *Satellite Sounders* situates you directly in the environment, the sounds, people, places. You can choose to focus your attention on the electronic sounds changing from the live GPS signal, or focus on the goings-on around you and the environmental soundscapes these create. The freedom to move between these two layers at will is important for the experience of the space and makes you relate to an everyday outdoor environment in an altered or heightened manner.

The installation space is an interior on the edge of the outside. The windows form the opening and the barrier at the same time. The space is closed and confined yet open and floating. You can move within this space and explore the sound moving through it and changing. It offers a different experience of time because on entering the space you must be aware that the work has been going in your absence, and that on leaving it will carry on. It is this extended time frame that I find interesting when exploring this material in an installation. You start to listen and experience that space on a very different level. You start to identify different sounds and how they are playing with each other, trying to hear what makes it constant yet constantly changing. (This approach has something in common with the music of very long duration by composers like Morton Feldman, Alvin Lucier). That is the kind of experience of space that I think the installation tries to get to.

AD

The *Satellite Sounders* are not about statistics but emotional and bodily transformations, a physical experience. Something that for me is completely different from the installation. Did you try to recreate this experience in the installation?

YH

I have a similar feeling in both. In the installation at the Netherlands Media Art Institute the windows are open in a space that is typically a black box. The space is empty and the placement of the speakers is such that they draw the audience towards those windows, with the projection between them. There is a physical focus on the installation's emptiness, the idea that you are moving towards the



Satellite Sounders (2008)

outside. I try to have people look out of the window, see the canal outside, see the location of the building not by pointing to it but by arranging the room towards it. The installation is a space of stillness in terms of bodily and physical engagement, which instead encourages a more meditative, contemplative engagement with the sounds.

AD

The installation is very open in an emotional way but at the same time very closed because of the barrier of the window, the walls; you can't escape and it's totally fixed. You have to surrender yourself to the experience, which also happens with the *Satellite Sounders* but in a different way, because as you are moving you become engulfed in the process of movement, which brings you in a different state. By contrast, in the installation the environment transports you to a different state. The relation and dynamic between the two is exciting. The performance is something totally different again because you are the performer that gives something to a large audience.

YH

In the two performances, *Amphibian* and *Sun Running*, I used the *Satellite Sounders* as a

latitude: 52 22 0.299316 N
 altitude: 7.8
 sat1: 20 48 236 24
 sat2: 1 47 83 26
 sat6: 17 28 310 24
 sat3: 19 19 164 27
 sat4: 28 17 271 18
 sat5: 31 3 101 19
 longitude: 4 53 0.0410156 E
 latitude: 52 22 0.299316 N
 altitude: 9.4
 sat1: 20 48 236 24
 sat2: 1 47 83 26
 sat6: 17 28 310 25
 sat3: 19 19 164 27
 sat4: 28 17 271 18
 sat5: 31 3 101 19
 longitude: 4 53 0.0420227 E
 latitude: 52 22 0.299316 N
 altitude: 11.3
 sat1: 20 48 236 24
 sat2: 1 47 83 26
 sat6: 17 28 310 25
 sat3: 19 19 164 27
 sat4: 28 17 271 18
 sat4: lost
 sat5: 31 3 101 19
 longitude: 4 53 0.0430298 E
 latitude: 52 22 0.299316 N
 altitude: 13.5
 sat4: preset 11
 sat1: 20 48 236 24
 sat2: 1 47 83 26
 sat6: 17 28 310 25
 sat3: 19 19 164 28
 sat5: 31 3 101 19
 longitude: 4 53 0.0450439 E
 latitude: 52 22 0.299316 N
 altitude: 15.6
 sat4: 11 81 227 0
 sat1: 20 48 236 24
 sat2: 1 47 83 26

... woah, it was... well the sound was amazing! the sound changes a lot and I ... what, what is it? what, how do you catch that signal? so what was that? well what did you think it was? I have ... no idea, tucktuck-trrrrrrrrtuck it's on our gut feeling, it's so noisy! uaaaahhh, I walked a square, it's hard to grasp, brings you into a nice atmosphere, you knew! you created the sounds! uhhhhh, why did you, because there are different sounds? you're causing a visceral reaction, what, what do you mean? but how then is this different to the old seaman using a sextant? is it in here? I mean do I know if, if I uncover this would I find out where I would be? it's intense? yeah, satellite signals! can we buy this? chukchukchk, you said we should walk around, silent spots, put one drum in it! your steps could be, your heart, you envision yourself being connected to a world out there, peeppeeppeeppeep, you're very much more aware of yourself than anyone else around you, but am I projecting to the satellite? no, the satellite is in its own world, you do this for what reason? they're like beasts, big beasts up there, one was really sort of like beepbeep sort of like, how do I know that this thing is actually communicating with the satellites? I accused the lamp-post of changing my signal, it was a little bit scary, a bit daring, you're very very self-aware, I would walk around, uh, you know, in the middle of nowhere, uh ok, what do I have to do? I just have to walk there? hehehehehe, a religious experience, disconnected from the world, there are these voices that obviously kind of come from above, very funny, you are being controlled and watched by some outside alien, that's what you feel, being followed, sending up a signal, here I am, here I am, here I am, when did you think of getting in contact with satellites? ddzzzztschdzzzzzzz dzzzztschhdzzzzzzz and what's the point of all this? you don't send a signal to the satellite? no, no, uh, so how does the satellite find you? drrrrrrrrrrrrrrrrrrrrr yeahyeah, I like to uhah ha ha hayeah, good, I like it, thank you so much, that was great, uh ha ha ha, a very original idea, yeah, different, uuuhyeeeah, it's odd, what do you do with it? I think that's perfect! never going to be the same, I love it! coool! oh my god! I'm going to steal it, how far can I go? a wierd experience but a lot of fun, looking like aliens, these people are aliens and they're making sounds...

Satellite Sounders (2008)

source of sounds. In *Amphibian* I was lucky to receive a GPS signal in the space so I used this as two channels of live sound input. I adapted the second performance, *Sun Running*, so that people could choose to go out and create their own private 'performances' with the *Satellite Sounders* during my performance. Individual audience members would come and go while the remaining audience experienced that dynamic between inside and outside. This worked very well, because it pulled the ideas of space out of the confines of the performance space. It started to bring in the dynamic that exists also between the installation and the walks. It gave the people who remained in the performance space the knowledge that someone outside is listening and having an experience that is somehow related, so their experience of that space became different.

I decided to introduce myself not as a performer or artist but as the navigator. I felt this was a means to draw away expectations of performance or spectacle. Like a navigator I would move through the data and sound material, taking time for calculations and a mixing of sonic elements that combine to give a direction and shape to the performance. So what I said is something like: 'Welcome to my Sonic Aquarium. I'm your navigator. Things will be happening and I will take you through them. Don't think of me as the performer you need to pay constant attention to, but I will navigate you through a series of sounds and spaces.' It brings to the fore the whole issue of navigating. And it seemed to help people's expectations and understanding of what was happening.

AD

That is of course an interesting angle, also because you are both a sailor and a composer, how do you see the relation between navigation and sound?

YH

I am following a sense that sound can bring one closer to environment, a mode of engagement through listening. It's interesting how the dominant mode of navigation is through visual notations and cognition of visual cues. This is totally different in animal navigation and migrations, the most well known examples that use sound to navigate are bats and dolphins.

Although I have begun research around this topic there is a whole series of issues I want to look into further. In producing a work like this, I had to become very specific, so minimal, in the kind of sounds, the experience of it, what things look like; the empty space with speakers hanging, the matte black *Satellite Sounders*. There is nothing colourful or tempting about the objects or the space. It seems almost to be empty and from this I really want to start looking for a deeper level of what that relation between sound and navigation might be, and language and communication and why we make this technology, how we potentially could use our own body and senses again.

I feel that this detachment of body and mind from environment, exemplified by the GPS, can be brought into focus through sound. The reason why I keep going back to water and amphibians and to what it means to float, is my interest in the bodies' physical memories. For example, I grew up on the cliffside in South Devon on the English coast, and regularly went back and forth to the shore. I can now go back in my mind and remember every step of that route over steep, uneven ground and everything about it; it's literally a physical, bodily memory that I have about it. That sort of recollection cannot happen in a virtual world. Another example: there is a physical state you experience on a moving boat which causes seasickness because you can't reconcile the balance and the shifting to your eyes and your brain. But once you make that shift you are constantly adjusting to the movement and can cross a boat without falling over. With examples like these in mind, I am really interested in keeping the physical space.

AD

The affect with space through technology is quite contested, I think *Sun Run Sun* is a very good example of how an affect with space and body is constituted via technology. Is this also something you're aiming for, or is it more a side effect?

YH

Yes, the role of the body, the physical, is key in the work's goal to make one aware of the body through technology. My hope is that

Sun Run Sun promotes the emotional and physical position of the body in environment, encouraging a bodily 'concentration' that might transcend notions of 'hybrid'.

That's why in this project I'm concentrating on the individual; your body becomes a focal point, from which you can't escape. In music, for example, we always had the musician to watch, somebody who was making the sound. This provided a focal point, somewhere outside of yourself. But the experience of music is very much an internal thing. *Sun Run Sun* (re)aligns the focus of music performance on the self.

I'm trying to present a phenomenon that one would not normally be aware of in a neutral way, leaving the interpretations to be made by the audience. I am not explicitly trying to manipulate a specific emotional or political response but open up awareness to one's surroundings. I've found that opening one's ears also opens one's eyes.

AD

How do you prepare people that go out on the walks with the *Satellite Sounders*? Is it possible to just let them go without any information or feedback possibility?

YH

It's proved to be quite a challenge working out how to present the *Satellite Sounders*. It seems to work best if I am present to hand out the instruments and give a short introduction to explain the concept behind it, my interest in navigational processes and the changing relation to environment. I then give a very brief introduction to the instruments themselves, that the components are only a GPS antenna, a small computer for receiving GPS data and processing it into sounds, and a battery all connected together and to the headphones. Finally, I ask them to walk, to explore, to pay attention to the sounds around them, to get lost and to return.

For me, the most surprising and rewarding aspect has been the reactions of people who come back with the *Satellite Sounders* and their openness to talking about their experiences. These conversations lead to a collective



experience that is very satisfying.

AD

The experiences of the audience direct already to what you briefly mentioned before – the split and connection between different spaces, worlds through technology. How do you see these different worlds – the real world where we are walking and the one that is invisible, i.e. the technological world (the satellites, the GPS system) – coming together, coexisting or is it more a reality jamming?

YH

Yes there is definitely a split between the nature of our experience of our immediate physical local reality and the superimposed abstraction of the technological sounds of location data, a feature I've consciously tried to enhance in this work. I leave the combination up to the attention of the participant.

But it does interest me that these geometric abstractions (in this case satellite data) are embedded in a considerably longer history than the technological moment we are in now, relating back even to prehistory, astronomy, calculations of solstice, abstract patterns such circles and triangles. Lucy Lippard's book *Overlay* gives an inspiring insight into the continuity of these processes in contemporary art practices of the 1960s and 1970s. In other words a level of the invisible is always present alongside the world we directly perceive.

AD

What is the function of sound, in this merging of worlds?

YH

This is an extremely important question with many answers. In *Sun Run Sun* sound is a catalyst for the experience, and shouldn't be approached as containing primarily musical meaning or symbolic references, or as a usable navigation aid. I'm trying to keep the sounds extremely simple. The idea is to use very basic and typical variations of electronic sounds to produce distinctive sound layers. They're like fundamental little sonic units, acted on by the data. The satellites connect to the GPS receiver every second. So there is a predominant rhythm, or various rhythms, that give the sound a certain quality. These rhythms are part of the data. They're not qualities that

I imposed on them, not my musical choice, but part of the material.

Sun Run Sun acts more as a provocation to let one's mind contextualise the everyday sounds and environment that we may not notice consciously. It gives a context, it forces a focus, it does this by adding to the total sound world but without claiming the attention of a piece of music to be listened to. Fundamentally the sounds make you ask questions of where you are and how you are moving and if your movements have any affect on the sound. Most people seem to expect that they will hear the movement of their position or location, but they primarily hear the movement of the satellites in orbit, which provokes a perceptual shift of perspective as the emphasis is not anthropocentric. I've said that navigation requires a correspondence between what one sees in the outside world and its representation on a map, and when this doesn't work one is lost. Likewise, the experience of sound is an internal process that influences the relationship between the self and the environment. Interestingly the use of sound in the *Satellite Sounders* often makes people comment that they see things differently...

Traversing The Route: From MediaMarkt to Cameroon

Esther Polak

<http://www.estherpolak.nl>

<http://www.nomadicmilk.net>

in conversation with

Annet Dekker

Esther Polak works with visualisation of landscape. Her *AmsterdamREALTIME* project (2002) was one of the first large-scale art explorations in GPS (Global Positioning System) mapping (<http://realtime.waag.org>). In 2004-2005 she developed MILKproject. In this project a European dairy transportation was followed from the udder of the (Latvian) cow, to the mouth of the (Dutch) consumer (<http://milkproject.net>). Polak is currently working on a new GPS-project: *Nomadic-MILK*. For this project the tracks of both nomadic herdsman and regular dairy transports in Nigeria are recorded and visualised. The project makes use of a newly developed GPS-visualisation tool: a small robot draws the tracks directly on the ground in lines of sand.

Esther Polak develops projects around the notion of space. By using new technologies like GPS and simple robots she aims to re-orientate and shift perspectives on issues of cultural and technological development.

ANNET DEKKER

Nomadism, landscape and nature are all recurring themes in your work. Where does this fascination for the landscape originate?

ESTHER POLAK

My fascination for 'the country' began when I was growing up in Amsterdam. I think that as a 'city person' you always have to create a construct for experiencing the countryside, because it is not your 'home'. In Amsterdam we lived in a top-floor flat. My mother found city life particularly condemning, and jumped at any opportunity to escape to the country. The flat did have a small balcony where we tried to grow all kinds of plants, but with very mixed results. To escape the city we would rent a house in the country, go on walks and bike rides, and inevitably we had to join the NJN [an association for young people interested in nature and biology]. The aim was to discover nature, and we would work and sleep in a cow shed full of all kinds of apparatus, microscopes, with dead birds hanging on the wall, pieces of wood, leaves and all kinds of other paraphernalia. We felt as if we were working at a cross between a science laboratory and a working farm.

These experiences were seminal to my experience of the landscape. At the NJN we always carried a little box with us when we went out to collect samples. The group was divided up into various teams – the moss team, the plant team, the bird team, amphibians, insects, fungi, and so on. The groups were very much linked to the seasons, of course, so you had to switch around to some extent. The important thing was that each team had its own way of looking at the landscape: one group would use binoculars, the other an identification chart. This way of mediating the landscape – taking a microscope to open up the world around you – is a strange way of doing things. It creates a tension between, on the one hand, the primal directness of nature as the place we all come from – and on the other hand, nature as something that is overly organised, at least in the Netherlands. Everywhere you look there are signposts and information plaques telling you how to experience the natural world around you: all kinds of signs telling you how to look.

In addition, I have a very poor sense of direction, and I am pretty much dependent on maps to find my way around. This also affects the way you experience the landscape, depending on the map you are using. For example, if you're walking in a wood with a map that clearly indicates where the nearest motorway is, you're bound to keep hearing the cars, whereas if the road is barely visible you're less likely to hear them. Each time you use a different map your experience is different, because you experience the surroundings differently. That moment and that experience are like a machine that is set in motion, and this is what fascinates me: It's what I've always been looking for. I am constantly in search of new ways to experience the landscape, especially in my work – from identification charts to microscopes, to binoculars, to nature maps, to GPS.

AD

The experience of doing it yourself is often very hard to recreate. How do you deal with this in your installations? How do you translate that moment of amazement for the audience?

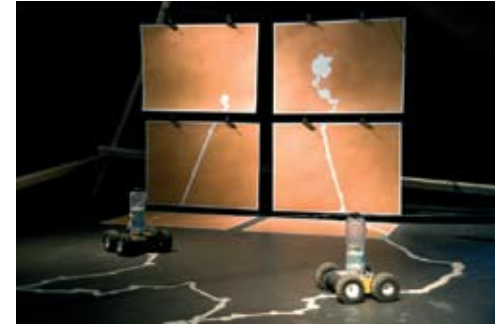
That is a big challenge; I try to make my installations more physical by creating a sculptural, spatial experience. For example, by making a network of sand prints in the space. During one of my presentations I explained very briefly what it was about and then got a robot to spread out the sand, making a drawing. The resulting sand drawing and the way the robot scattered the sand drew an immediate response from the audience: Right away they envisaged how the cows in Cameroon behaved. People then come to me with more detailed questions, but I'm not sure whether to respond, because in doing so I think I'm breaking with that moment of amazement, and the work turns in to an almost anthropological or social research project. I am more interested in the experience than in the idea or the issue of authenticity.

Currently I am trying to present the potential of all the tools I have developed in such a way that this shows the essence of the experience. If I'm working with the robots, showing the very different tracks they make, either with the participants or on my own in the studio, I can sense that experience and fascination very clearly. It's that experience that I want to get across to the audience. To do so effectively I try out various situations, both inside and outside, in a performance setting or in an installation. I am looking for a form that can communicate the experience without me being there. You could call it a kind of trade moment, work that communicates the essence of what I am doing.

I find this way of presenting very useful at the moment. The robot itself is also much more physical than the way I used to work. A robot might seem very practical and considerate, but in fact it is extremely stubborn and often refuses to do what you want. But for me that's the power of the artistic dynamic. For me it's a challenge to make the static digital technology more unpredictable and physical.

AD

At the moment you are researching the route of international milk production. Why milk, and how do you see its relationship to the landscape?



NomadicMILK Nigerian version, Esther Polak and team, Transmediale 2009 (Berlin), <http://www.nomadicmilk.net>

I find milk a very interesting case because it relates to my own relationship with landscape, the direct environs of Amsterdam: the fields, everything you see from the train window, the way the landscape looks is very much shaped by milk production. I was fascinated by the way that an economic process can leave such a mark on a landscape. This is where the roots of my interest lie, the combination of nomadism, the experience of space and how technology works. I see the way dairy cattle are kept in the Netherlands as technology. So you could say that one fascination flows in to the other.

AD

You studied fine art at The Hague School of Art. How did you make the step from painting to new media?

EP

It was an interesting journey. At the time, I started painting because I had a rather naive love of the landscape. In the Netherlands the landscape has always held a special position in the fine arts due to the long tradition of landscape painting here. At art school a lot of emphasis was placed on the autonomy of the image. The image should speak for itself, and my idea of mediation did not fit in very well with this. At the Rijksakademie [for the Arts, in Amsterdam] I studied in the Graphics/New Media Department. I found it hard to relate to the autonomous ethic of fine art. However, working for a few years as a DTP worker for various newspapers was an eye-opener for me. I discovered that a story's meaning could change completely depending on the photo you published next to it. Essentially you can use a random picture with any story, as long as the caption is right, but the meaning of the photo and the text will change each time! This fitted well with my idea of transformation, how different technologies can change our experience of the same thing. In retrospect the objective facts and reality that come along with every new invention turn out to be subjective after all. That is what makes working with new technology fundamentally different for me from working with oil paint.

I was interested in GPS from the first moment it was introduced to me, because it seemed to be extremely realistic. It told an almost

technological truth about an event that had not existed before it was made visible with GPS. This stems from the fascination I have with microscopes and binoculars. Suddenly you experience things on a different scale – what you saw just as a plant suddenly becomes much more, its own biotope – it's a scale-changing trip, an overpowering machine that makes visible new possibilities and avenues.

AD

In presenting your projects you use a variety of techniques: visualised GPS drawings, sound recordings, video recordings, sometimes photography, even sand drawings. You depict the landscape with different tools, all of which are presented as being equally valuable. Do you see this way of presenting as a new form of landscape art?

EP

Yes, for me it was the solution to how I should deal with the landscape in a contemporary, relevant way. I've been looking for a long time for a way of presenting my work, based on my fascination with landscape painting. As well as painting I also looked at land art, in particular the first experiments in the 1970s, and conceptual art in the same period. I was able to use some of the steps they made in my GPS experiments. The technology I use is a way of adapting their ideas in to practical projects. The greatest inspiration for me was Stanley Brown. He asked people to draw where they had walked to get where they were, and people used simple materials like paper and pencil. That is a starting point, a path that has already been laid, on which I can build. The power in Brown's work lies predominantly in the conceptual step he made, but the technical tools that I can use in turn raise new theoretical, conceptual and artistic issues.

What I also find very important is the interpretation of the landscape. I referred earlier to dairy production in various parts of the Netherlands, and how the means of production have defined the carving up of space. This is often neglected, but it is an economic activity that is reflected in the form. If looking at the landscape and taking a bite of cheese or drinking some milk is directly related to a certain economic structure this offers fascinating

possibilities for interpretation and experience. In the US they have a Centre for Land Use Interpretation. The title is a very good summary of what I'm fascinated by: a fascination with land use interpretation.

AD

A lot of artists who work with GPS and location-based technologies are less interested in the technology than in the stories that come about when people have followed a certain route.

In your work the interaction between the map visualisations and the participants has often been a point of departure for telling stories – the result is above all a living portrait: of a landscape, of stories and people.

EP

Yes, I have used locative media as an interactive and storytelling tool, although that was not the initial goal. With *Amsterdam Real-Time*, for example, the main goal was to give people a sense of their own perceptions. We did not want visitors to adopt the 'surveillance' perspective or the voyeuristic gaze, we wanted them to try to identify as much as possible with the participants. We used a theatrical method: namely we conveyed participation in the project as a very special, even enviable opportunity. People really got involved and immediately became part of the project – the machine was set in motion. The point of departure was not to emphasize the interaction between people and the traces they leave behind, although we did print out the individual routes and hand them out to each participant as a souvenir. Looking back now, I think it was a rather naive decision: We had absolutely no idea how much impact the print-outs would have on the participants. People pored over their printed-out routes in utter fascination and couldn't wait to share their stories.

The same thing happened in Cameroon, too: people immediately recognised themselves in the sand routes as the robot carried them out. I think it is important to realise, though, that not everyone uses maps or that everyone reads or draws a map in a similar way. I let people look at the patterns they made based purely on memory, based on their own route, not about how people read or use maps. For me it's all about revisiting spatial experience – as a

way of bringing about a new perception. I am interested to hear how people talk about their own route, the terminology they use. The people we spoke to in Cameroon, for example, did not draw maps but explained the route using certain words. But in the end I think the essential thing is to create a certain tension in the visitor faced with the new and the unknown. This moment of tension takes place when I stand on a certain spot with the people who have just followed a route and who see the robot drawing out their route again. The question then is whether this means anything to these people. That moment of excitement and amazement – when people's way of identifying with their own route changes – is what it's all about.

AD

Has working with traditional techniques and tools changed the way you work as an artist?

EP

Working with new media often requires a different approach than the usual visual arts one. You have to juggle so many things at the same time and that makes it almost impossible to work on your own. In the visual arts this is still considered rather strange, although in the performing arts no-one would think of putting on a play all by themselves, with the lighting, direction, staging etc. to deal with. It's all about teamwork. The visual arts has a strange tradition of the lone artist who has to do everything alone, but I don't think that works with new media. Working with people from different disciplines is challenging and at the same time inherent in the media itself: knowledge about programming, building robots, handling cameras, storytelling – all of these are specialist fields of knowledge and can't be found in just one person.

For *NomadicMILK* I set up a team that includes an anthropologist, who was involved primarily in the first stage of the project development, helping me to think about traditional dairy farmers. I also had someone with a technical background. As soon as we had worked out what we wanted to do we involved a number of specialists, for example, to look at the possibilities of using robots. It's a dynamic way of working through a process, in which you



On Exactitude in Mapping (2008) performance, Ghent



NomadicMILK project, Cameroon version, Esther Polak and team, 2009, <http://www.nomadicmilk.net59>



NomadicMILK project, Nigerian version, Esther Polak and team, 2009, <http://www.nomadicmilk.net59>

are constantly looking at the developments from different angles. In addition I consulted a number of other people who had a more reflective role in looking at how the project progressed.

What I myself am going to learn or look at and which things I might leave to others is also part of making choices, it's part of the process. In part it depends on the budget: if there is enough money it's easier to delegate tasks to others.

AD

To what extent do you adapt existing technology? And how do you make knowledge accessible to others?

EP

I'm very much in to adapting existing technology and using it to design specific tools. I deal with specific research questions and these demand specialist solutions. But it has never been my intention to come up with generic applications. Although you do see this happening in the area of consumer technology. All sorts of people are programming small programmes, very generic applications, for GPS and tracking purposes and are making them available to others. But that is a very different field, and if you want to carve out a role for yourself as an artist you have to be ahead of the game. To some extent I am involved in broader applications but without developing social or directly useable applications.

My strong point is the conceptual side and that is what I want to share and push forward. To keep developing this knowledge I've set up a 'locative media club' together with Michiel de Lange. I see that above all as my 'open source domain' because that is the knowledge that is most important to me. It's my field of expertise and I want to see it continue to develop, not only for myself but for others, too. The field I work in is small, but it has a huge social movement behind it and if you want to think about it in an exciting and relevant way you have to set up your own thing. The meetings are a fall-back, a way of keeping up to date and read articles. Before you know it you've lost your role at the forefront of things and are spending too much time working on

production issues that tend to demand all your attention.

AD

Working with new technologies is still contested in the traditional arts. Do you believe that 'new media' have their own status?

EP

The arts have always had an obsession with new technology, and that will never change. I think it's important that this new art form has a relationship to established art history, but I would not claim that working with oil paint, photography and GPS is all one and the same. Because it is not: Artists have been experimenting with oil paint for centuries; photography has just ceased to be a new technology; and GPS and all sorts of other technology are just on the crest of the wave.

For me the essence of a new medium or a new technology is about developing a new way of looking at the world and how you experience it. In ten years' time I might not be interested in GPS anymore, because a new technology will turn up that deals with mediating information in a different way. More importantly, I believe that working with new media really is different because it comes from the 'normal' world and was not specifically developed for artistic production. There's a big difference between going to an artists' supply shop and going to an electronics outlet like MediaMarkt to buy your materials. In the artists' supply shop you are among (amateur) artists, but at MediaMarkt you are surrounded by regular people with all kinds of jobs and interests: You are at the centre of society. If you take the materials and their origin seriously, the work you make will also have a relationship to that society.

It is important to bring new technology art out of its techno-centric isolation: Technology is fascinating but it remains a means rather than an end in itself. I would suggest that we need to look to other art movements, and I personally am influenced by 1970s conceptual art. I sometimes say: 'Media art is conceptual art put in to practice'. But land art is another reference point for me. Someone recently pointed me towards Surrealism as a way to bring more contingency to media art. I would like to

look in to these areas. I do this in one way by changing the way I present my work, by letting go of the storytelling element and searching for points of transition where the experience comes about. I found it important to differentiate between myself and a journalist, anthropologist or a scientist. Art has its own field and that is where the power lies. Above all it's about experiencing space and if you do it right the stories will appear of their own accord.

I am interested in the impact of new technology, particularly in terms of how we experience space. The social or political consequences of surveillance technologies (such as GPS), for example, are part of the work, but they're not my primary interest. As a 'new media' artist I try to develop a relationship to the place of technology in society. This involves developing a certain level of engagement, but that doesn't always entail being critical. It is essential, though, to avoid negating your audience's critical position. In my work I offer an open approach that gives the audience a great deal of space to draw their own conclusions.

AD

Your work is often cited as exemplary of a politically and socially critical approach. Andreas Broeckmann, for example, posted the following on a locative media mailing list in 2004: 'I have always understood the term "locative" as pointing in both directions, the potential for enriching the experience of shared physical spaces, but also fostering the possibility to "locate", i.e. track down anyone wearing such a device. This does turn the "locative media" movement into something of an avant-garde of the "society of control." I believe that people are aware of the ambivalence, but I am wondering at which level this critical aspect is brought into an arts project.' He goes on to mention your Milk project as an example: 'This is not to say that artistic work in this field is impossible. I believe that, for instance the Milk project by Polak/Auzina might be a clever way of approaching the issues by simulating the tracking of trade routes.' What do you make of this? What do you think about a comment like this that would appear to go beyond your primary goal of portraying how the perception of space changes with new technologies?



It's true that many people interpret the project this way. That is fine, because it is an important element, but for me it is secondary. This is even more apparent in the *NomadicMILK* project that I am currently doing in Nigeria. I tell a story about a locally produced product versus global trade, and of course that is politically loaded. But whether global trade systems are good or bad – apart from the issue of whether I can judge those criteria – is something I don't think you can predict. I find it fundamentally impossible to come to a conclusion on this. I am well aware of the journalistic approach, and I see the importance of explicit opinions, but for me this obscures the advantage – or the open space – that art entails. I believe that an open stance offers much more space for other meanings. For example, my research into the way we experience space opens up other layers. I don't believe in making moral statements in my work: this suffocates the work and makes it impossible for people to draw their own conclusions.

AD

To what extent have you found that using GPS has changed people's lives and behaviour?

EP

That's a very difficult question, particularly because I am right in the thick of it. However, that is what my work is about and much of my old works have become classic examples of this. Personally I think that the widespread use of satellite navigation (SatNav) systems is a good example of how behaviour and expectations are changing. In the past people would call the breakdown services only when their car broke down. But now that finding the way has become such a technically mediated experience due to SatNav, people phone the services when their SatNav breaks down too! They phone up to say: I don't know where I am or how to get to where I need to go, and they expect the AA to solve their problem, which they experience as a technical problem. That's a bizarre phenomenon, and it shows how it influences your experience of being somewhere. I recently read a newspaper article about someone driving in to a canal because their SatNav had got confused. A GPS accident!

However, behaviour remains hard to predict. For a while I thought that specialist maps would become very important and I would point to the example of Justus van de Broek's 'You Skate' project. It is a website with all kinds of specialist information and routes for skaters, for example, about the quality of the road surface. I could see the rise of highly adapted platforms for exchange for individual needs that would allow people to exchange information and photos in real time and in an advanced way. But in reality information exchange happens in a much simpler way. You also see that as a professional you can do certain things that are not picked up on in the 'real' world or that are not being built by amateurs.

AD

As you said the use of new media has changed the traditional way of working in the arts. You're an artist who is always looking for new challenges and one of your new steps is to use GPS as an editing tool. What are you aiming for with this project?

EP

It's not so much that new technology has changed the way I work. It is the decision to work with new technology itself because it changes the way you work. It's true that I'm always looking for new steps, and sometimes these are borne out of limitations. I tend to combine several ways of working, from practical work to theoretical reflection, sometimes touching on production, hands-on work. That's how I came by transforming GPS data in to visual data. I found it an interesting discovery and it was the starting point for further research.

Now we're developing a tool that makes the raw data that is collected through the GPS as 'real' and meaningful (in the experience of both participant and audience) as possible, even to the point that the data can become almost fictional. A GPS editing tool makes the data flexible so that its meaningful forms can be emphasised and composed by changing and manipulating the 'true' data itself! The interesting question is how this editing alters the experience and identification.

In Search of the Unexpected

Martine Neddham

<http://neddam.org/>

in conversation with
Annet Dekker

Martine Neddham is an artist who uses language as raw material. She has worked with 'speech acts', modes of address, words in the public space, and since the late 1980s created a number of text objects, both in museums and large scale public commissions. She 1996 she has created virtual characters on the Internet, who lead an autonomous artistic existence in which the real author is never disclosed. Martine teaches at the Rietveld Academy in Amsterdam and at the University of Quebec in Montreal.

ANNET DEKKER

To create a layer of mystery around your projects during many (art) events you have presented your work through others, handing them the authorship. Until recently you have always remained the invisible author. Now you have decided to come forward as the author of several virtual characters. This is a big step, even though some people may wonder if you are really a person in the flesh or just another character. Why did you chose to do this?

MARTINE NEDDAM

Keeping the invisibility of the author did indeed serve an artistic purpose. At some point I noticed that the work had entered the history of net_art with that specific feature: the invisibility of the author had clearly been recorded as a part of the art in books about net_art, in PhD theses etc., so it was time to loosen the control. The advantage is that I can now speak openly about being the author of Mouchette, David Still and XiaoQian at the same time. I can tell all the backstage stories, make the connections between the works and let them be published. My wish is to recover a place inside the art sphere and not in its margins where net_art is confined, and this is one step towards that.

I always thought of this decision as something rational, which came at the right moment in a natural way. I hadn't realised the emotional implications and I found myself, to my own surprise, grieving about something I had lost which I couldn't exactly name. Was it grief for a living being who had died? Or some secret corner of my psyche that had lost the source of its expression? Or a separation from beloved companions? I know that these interrogations will find a place in my next works, although I don't know exactly how. The new and reduced Martine Neddham is finding it hard to become just a simple 'I' again.

AD

You studied literature, language, architecture/décor and sculpture and have had a long career in public sculpture. In the early days of the Internet you created your first virtual character, Mouchette. What made you choose this medium and what interested you so much in the Internet?

MN

My background has always influenced my work, especially the literature studies I undertook in France. I started working as a stage designer after my studies and together with a group of friends we made abstract theatre. The plays were not about the situation, but focused on the presence of the actor and speech. This idea of language, of the act of speech transforming the space is still something I strongly believe in and I have continued working with. For the public commissions I was given I also worked with language and text. As with a theatre play I didn't necessarily go into what the play said, but interpreted and imagined another perspective for the situation. For example, the space of a square or roundabout is a given and spatially you can't change much, but by simply renaming the space with a sign you can change the mental perspective people have on it. I also applied this way of working in the gallery and the museum space. Language was my material. I would use expressions and stage them in a certain way. For example, I would write a text on the floor that would only make sense when someone walked on it.

I was quite particular in the type of texts I used, because I was interested in modes of address. I didn't do poetry or narratives, but confronted people by using the 'I' and the 'you'. Probably affected by my previous experience in linguistics and in stage design, I was very much interested in speech acts and what happens between the sender and the receiver of the message. At times I used offensive text with the purpose of analysing something – not the meaning but the mode of address. I wanted to trigger an emotional response within the safety of the walls of the art institute. Public space was of course much more restricted. But there I very much enjoyed the first hand reactions from people. To me public space has

always been about public and less about space. Everything that I made and designed was in relation to a certain public. I regard a public space as a public situation. The work of art is the relation you create between you and your public.

AD

And then the Internet came...

MN

It was fascinating; it was a dream come true. All of a sudden you could address and be addressed. When you create a work you can more or less imagine people's response in your imagination, but you're not there when they are doing it. And suddenly there was the possibility of being there when they talk back; being there and not there at the same time. That was utopia, one of very few moments in one's life when that happens.

AD

How do you see your position in those early days, within that community?

MN

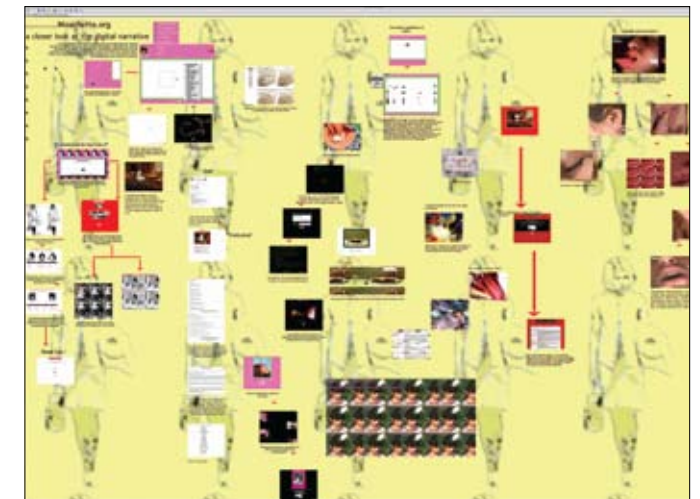
Many people were creating tools to transform the web and they also made them available to others. The web was exciting because it was something you received, and that you could also pass on. It resembled a gift economy and art was more than an aesthetic enterprise. My personal interest was less in creating technical tools and more in analysing forms of communication. I made my first, very primitive web pages in Mouchette in HTML. When users wrote back I would edit that into HTML pages and post them into my site. In 1998 I commissioned an interface with PHP and that result very much resembled a hand-made blog - one of the first blogs. Artists were really on the frontline.

Something I still preserve as precious was the invention of navigation in a text by means of 'links', and in that way going from a web page to another web page. 'Hypertext' was a word people often used at that time. It showed how much the web was perceived as a modification inside the structure of a text, breaking its linearity. After a while more features were introduced, for example 'frames'. This made it possible to organise circulation in several pages. I wanted to get the viewer lost in a

<http://mouchette.org>



Views and commentaries about Mouchette.org and its circulation. Found on the net in 2001. Probably made by a student in digital arts.



<http://mouchette.net>



very complex navigation, where the placement of the links was invisible or unexpected. To me it was very important to keep the web navigation very organic, a mixture of the expected and the unexpected.

This search and interest in the unexpected is something that I don't see much any more. In the beginning it was everywhere because everything was a surprise. At the moment it seems that few people are on the Net to have an unusual experience or to be surprised.

AD

It seems the Internet has lost much of its original energy and optimism. How would you describe the Internet at the moment?

MN

Ruled by commercial purposes, with very little private initiative and over-designed. Of course it has reached a certain development, especially in the network features and in the way people communicate with each other. But the visual quality and diversity is poor. It is also evolving in a dangerous way because users don't own their content on most public platforms and it often ends up being used for commercial purposes. Few people are aware of the consequences of Facebook owning their content. Web pioneers were extremely aware of these things. We were asking ourselves moral questions about every interaction because they were new and every action could become an issue and raised questions. That is why it is so important to keep these origins alive because it preserves the traces and the original dreams.

Very few people recognise why the commercial tools are made and to what end. Maybe the role of the artist is to show that. I still see a lot of creative tools made by individual artists and some are very interesting, but they are hardly discussed in fora, even though they are easy to use and could be useful for designers or a general public. Nobody seems to be interested. The biggest problem is the invasiveness of the large companies. The voices of non-commercial innovation are too small to get heard. This is where the small creative networks have to find a solution because huge networks are swallowing them; they get pushed aside and become invisible.

AD

If you look at your different characters, Mouchette, David Still and so on, what is the relationship between them?

MN

With Mouchette I didn't really have any plans, I just started from scratch: what name do you want to give yourself? Something everyone experiences when you choose an e-mail for example. Starting from that and building up was completely organic. Mouchette was really a mixture of my own fantasy and what the web was becoming. The element of the unexpected was very important in the site and still exists because it has this confusing navigation and it is based on playfulness and surprise.

David Still (2001) was a consciously designed tool for a public I knew.¹ I wanted to observe how people would use this tool. I created David Still both as an online and offline character, as if he lived in the real world. Originally it was a work I did as a public commission for the city of Almere as a representation of the public sphere there. I used certain aspects of the city, like buildings - David Still lives in a street called 'De Realiteit' [the reality], which is an architectural experiment in Almere. So it was both reflecting on the public space in Almere as well as on the public space on the Internet.

I had to end David Still's main function, sending e-mails from his e-mail address, in 2005 because spam has become such an overwhelming phenomenon that it made it impossible to send messages from an unknown source. Spam started to rule our e-mail exchanges and from that point on David Still was no longer viable - nobody wanted to hear about an unknown person. Different web hosts around the world came up with different legislations against spam and I had to change hosts three times, eventually disabling the send function.

The *Virtual Person* project that I started in 2008 is also a tool; an experiment with web design and personal expression. The Internet is very much developed as far as networking, dialogue and exchange goes, but there are very few tools for personal expression. *Virtual*



<http://mouchette.org>

¹ People could send e-mails coming from David Still to others, thus using his identity.



Person.net is a limited tool, because I wanted to make it as accessible and usable as possible. It focuses on certain visual features that I think are meaningful to develop, for example fading one image into another instead of linking them. When you make something with many functions, people use the one by default because there is too much choice, blogs for example are a clear example of this. People who design it say you can do many things with it but users ultimately only use default functions. The result is uniformity.

Most of all, by creating <http://virtualperson.net> I wanted to offer the use of visual features that haven't been explored; a mixture of text and image in a visual composition. I believe this is an area with huge potential but at the moment texts and images are still treated as separate. They never really merge onto the same surface, contradicting each other or intertwining in a way that creates a different meaning. In Facebook and blogs you can upload image and text separately but it is not possible to combine them in more sophisticated ways. These interfaces are not designed as creative tools. I want to explore the relation between the two in a consistent way. It follows my previous works in the public space and the visual design of Mouchette.

AD

In a way your online work is emblematic of the Internet; reacting to communication systems, issues of identity, spam, image and narrative tools, etc. But also the technical side is highly developed, even though the websites look very easy in set up and design, they were made with state-of-the art technology, mostly adapting and programming existing or new programs and software. Whereas most net_art is known for its innovative use of technology your work is never really mentioned in this respect nor did others ever reflect upon it. Why do you think that is?

MN

I never liked to use technology as the subject of my work. But indeed if you are not interested in technology you can't work with the web as a medium. From the start I was very close to the new technological developments. Web editing was available to everyone, and when

new features appeared in the browser, artists were the first to use them while commercial sites had to wait six months before they could implement them. Artists could create something within half an hour, giving it a certain creative spirit. That may not be the case anymore. At the moment large companies invest huge sums in experimenting and are much faster in finding new solutions than before. But I wouldn't say that this is innovation: Innovation is not necessarily building on something but it is about questioning, for example how to not use something. You try to think of something in a different way, that is where innovation comes in.

AD

You made work especially for the Internet, but could you see the work presented on other platforms – public (urban screen/mobile phone) or private (gallery/black-white cube)?

MN

Mouchette has always existed in the public space as a collection of different works of art. It wasn't always easy to exist simultaneously on the Internet and in the world of art. Sometimes I was invited as Martine Neddam and I would ask the museum to present it as Mouchette and to become the accomplice so as to keep the author anonymous. Not everyone accepted, because these were not easy or obvious conditions. But some did, and I created installations in the gallery, sound-works, a shopping bag as part of an art manifestation in a shopping mall, etc. I used all the existing media and materials available to communicate. I don't see the Internet as separate from other media, it is just one of the tools. But it still depends very much on my own energy to keep Mouchette connected to the world of art. Most curators don't think about the possibility of showing art created for the Internet, let alone in another medium.

AD

What about using mobile phones, a communication medium that has integrated, text, photo, video and Internet, as a platform? It seems an ideal combination.

MN

It is tempting to make special work for mobile phones, but it is still difficult to integrate and to circulate it through various mobile networks.

You used to have WAP and Palm, but after one year the technology disappeared. The thing with these mobile devices is that they are enormously controlled and you have to go through so many layers in order to get something out to the public: the whole system is build to limit the possibilities and the creativity of the user. The web wasn't like that. Suddenly, from one day to the next it was in the hands of the user. That particular freedom is essential if you want to create something.

AD

And what about Urban Screens? People are also referring to them as large communication platforms.

MN

Yes, I would love to experiment with that. For *Virtual Person* I was tempted to bring it into the public space, and billboards and other screens in the public space seemed a logical place. But there are so many limitations. First of all it would be really difficult to carry out tests and secondly I realised that I would lose intimacy. The physical distance from the body to the screen, for example, is very important to take into account. It makes a huge difference in impact and experience on the body if you have 1.50m (the television distance) or 50 cm for a computer screen, 20 cm for mobile devices or 20 meters minimum with urban screens.

Urban screens have totally different parameters; it is a medium in itself – the distance to the viewer, the scale, the lack of sound, etc. It relates more to billboards and advertising than to Internet or mobile phones. Artists have to be commissioned for the situation. Because the advertising space is expensive, it becomes very difficult to experiment freely with the medium and develop a specific language.

AD

How do you see the relationship between the virtual and the real – also in a more bodily/emotional sense? David Still to me was almost tactile, someone very close to you, maybe because he addressed you in a very personal way. *Virtual Person* is now a tool for making your own *Virtual Person*.

MN

Virtual Person is about text and image correlation and I would like to make that relation



<http://www.virtualperson.net>





<http://davidstill.org>

more physical. I am very interested in using touch screens. I would love to embody the connection between texts and images. The act of touching a screen generates a completely different experience than the use of a mouse, even though the use of a mouse is a tactile experience, it emphasizes more directly the bodily experience of the net. I don't believe that the Internet excludes our bodies. Nobody teleports, we still look at the screen using our physical body, with our spine straight or crooked, and with our hand moving and touching. We use our body to inform us about our non-body experience.

Mouchette, for example, is very much designed from the body on. I would mirror my own situation, my body to the screen, posing an imaginary situation where the viewer and I are mirrored on both sides of the screen, like in the work *Flesh & Blood*. When I used sound I recorded it close to the microphone to create that intimacy. The low volume involved the body of the viewer in the act of listening. The Internet is an extension of the body and an out-of-the-body experience, all in one. People tend to say that their body vanishes in the net, but this is precisely that experience that we act out with our body! The fact that your gender is invisible online is a body experience; when does that happen in real life? Many of the early Internet works play precisely with the physical experience of the disappearance of the body.

This is why I think it is so important to keep the old examples alive because they bear the trace of the most important discourse on Internet which is still valid but might disappear in the evasiveness of the Internet.

AD

As said before, the biggest challenge for the Internet today is finding these 'invisibilities'.

MN

Yes, and in that way I would say that the institutions are not doing their work. They should keep track of these early creations. Some do, like Rhizome, Turbulence or Eyebeam, but there should be more attention in renewing the interest of the public, for example by presenting works again in new contexts or wider contexts.

Another concern is the missing link between the works of net_art and the public. In the beginning the artists did everything by themselves but at the moment that has become more difficult, leading to unstructured relations. This should be one of the tasks of the museums and art institutions and it is not that much work; posting one item a day would suffice. Valuable works of art are already disappearing. Work that I bookmarked two years ago has been taken off because someone did not pay the server costs or the domain registration or couldn't keep up the maintenance. These are simple things, much cheaper

and easier to do than storing a painting or a sculpture in a storage room, and need to be done otherwise many creative possibilities disappear from our landscape and our memory.

AD

How do you deal with the speed of change on the Internet, especially for your older sites like Mouchette?

MN

There are different levels. Some of the changes are very hard to keep up with, for example the scripts; by changing platforms and operating systems the scripts become less compatible. Suddenly a certain script doesn't work on a new version of a browser for a certain platform and then some viewers will not see the work as it was meant to be. This is not a new phenomenon, compatibility has always been one of the main issues of the Net, but the changes are hard to keep up with. To have a 100% successful viewing you need to create a different version for each configuration, which is a highly technical solution and needs to be re-adapted constantly. I would love to have it done, but I can't pay for it and at the moment there is no funding for pure maintenance. One year ago I stopped creating new works for Mouchette but I am still working 10-15 hours a week to keep it alive, maintaining domains, re-registering etc. If nothing happened the art would die. I have complex scripts that address people one by one and they still function because I know their failures, I keep an eye on it and fix the little mistakes by hand when they happen. It is a very personal use of low technology; everything is made with small pieces of fabric, like a patchwork.

People also regard the Internet as virtual, and they believe it means 'immaterial' but it is not. Your imagination transforms into actual matter: bits on a server. A computer changes matter into visuals and words. The virtual world consists of bits and pieces: the Internet is material, you can break it and make it disappear; that is the reality of the virtual. When you realise how much data Google is saving, that is an enormous conservation of hard disks in large rooms. Maybe when people start to see that the Internet is material they might value it more, or treat it in a different way.

02

Museums **(Part Two)**



Series of photographs from Deventer, Netherlands. NSB-ers and shaved 'moffenmeiden' (Krautgirls) brought in by members of the 'Binnenlandse strijdkrachten' (domestic forces), Collection Nationaal Archief, Flickr Commons



***brambly* pro says:**

I'm not sure about translating moffenmeid, it doesn't sound terribly PC in English. "Kraut-girl"

Posted 4 months ago. ([permalink](#))



sarflondondunc pro says:

I read the translation as Shaved maidservants

Posted 4 months ago. ([permalink](#))



***brambly* pro says:**

"mo" is a bad word for "German".

Posted 3 months ago. ([permalink](#))



yhoitink pro says:

Translation:
Members of the NSB (Dutch national socialist party) and shaven 'kraut girls' are being brought in by members of the Dutch Resistance.

Posted 3 months ago. ([permalink](#))



batvoca says:

NSB = Dutch National Socialist Movement
Dutch Resistance = Internal Armed Forces

Posted 3 months ago. ([permalink](#))



Fabricator of Useless Articles pro says:

The Zeiss eye watching them all. The Lens on the camera a Zeiss lens?

Posted 3 months ago. ([permalink](#))



rogiro pro says:

@Fabricator of Useless Articles: I added the tag 'Zeiss' because on one of the windows on the left there is an advertisement for Zeiss.

Posted 3 months ago. ([permalink](#))

Comments posted on the Nationaal Archief Flickr Commons belonging to the photo above

Introduction:

Heritage Online

Heritage 2.0, Erfgoed 2.0, Museum 2.0, cultural institutions and practitioners are increasingly adopting the possibilities of Web 2.0 as part of their activities. A plethora of events have been designed to inspire and advise the cultural sector how to use online services for marketing, curating, education, communicating with new audiences, crowdsourcing content, or reorganising their institutions. Dutch museums and archives are experimenting with both online tools and new media use in the physical space. 2008 saw the launch of the first Dutch collection on Flickr the Commons, which aims to increased access to publicly-held photography collections and provide a way for the general public to contribute information and knowledge. The trend for Dutch museums to join forces with partners in the same city to increase their outreach has been evident, two good examples being museumgoudA, and in Friesland the Fries Museum and the Keramiekmuseum Princessehof. In Gouda three cultural institutions are redefining their role in the city, examining local meaning and cultural identity. At the same time research and experiment at cultural organisations such as Waag Society offers heritage organisations new platforms for, for example, multi-user realtime gaming using mobile and location-based technology, which are well suited to heritage content (in 2008 for example it was the turn of religious heritage). Museums such as the Rijksmuseum are at the forefront of researching the use of mobile devices, and this field looks set to expand in the near future in to other museums in the Netherlands. Intermediary organisations such as Erfgoed Nederland and DEN have organised training programmes and a series of conferences on e-culture.

2.0 is not restricted to the heritage sector, of course. Research in to the use of online tools for the broader cultural sector is needed if the possibilities are to be used to their full potential. In particular issues of how to work with your 'community' as a cultural organisation is highly relevant to all arts disciplines. Virtueel Platform looked outside the Netherlands for inspiration and input as to how to best adapt the cultural sector in the light of new technologies. In this publication the focus is on one area, that of online tools, and also mobile devices, and the emphasis here is largely on the museum. In the past year a number of international



Title: The Threatened Swan
Artist: Jan Asselijn
Year: before 1652

A larger than life swan lifts itself with threatening, out-stretched wings. Hissing fiercely it defends its nest against the approaching danger: the dog swimming in from the right. The dog seems to have designs on the eggs in the nest. The movement of the swan is extreme; its feathers fly up around it. The painter Jan Asselijn has convincingly depicted this spectacle, it looks just like a swan rising up in sudden anger. Through using a low viewpoint he has made the swan tower above its surroundings. This makes the scene even more impressive.

[More](#)

RIJKS MUSEUM
 amsterdam



(Left and above) Front and back of the Rijksmuseum Widget

experts in this field were invited to the Netherlands to share good practice. Nina Simon, based in California, is the author of the very popular blog Museum 2.0, which looks at social technology and the participatory museum. For her the web is not holy, it is all about making museum visitors communicate, with whatever means necessary. Simon looks at web-age tools in relation to their pre-web era equivalent (group project = wiki; word of mouth = ratings enabled site) and examines what such changes mean for the role for cultural institutions. Whereas their authority was traditionally found in being a content provider they are increasingly becoming a platform provider. For Simon, social technology is not so much about people connecting to the web but about gaining richer experiences and connecting with each other.

Being succesful at social technology as a museum requires being both being an authority and being an active participant in your community of 'visitors'. Shelley Bernstein of the Brooklyn Museum could be described as the participant extraordinaire. Bernstein has turned the museum in to a prize winning institution by cultivating local community links and developing a relationship of trust with users/visitors. A series of innovative projects like *Click!*, *Posse*, and most recently *Ist Fans* are both innovative and simple: the aim is to achieve a great deal with as little programming effort as possible.

Mike Ellis, former Head of Web for the National Museum of Science and Industry, UK and currently a solutions architect at Eduserv, organises events such as the Mashed Up Museum and is a key presenter at international conferences such as Museums and the web. Ellis champions the freeing-up of heritage content, arguing that people increasingly demand more content via more channels and that they will get what they want from whoever will provide it: ninety-five per cent of the referrals to London's science museum website came via myspace, for example. Web 2.0 has taught us that authority comes from authenticity, and not always from a designed, understood, moderated pathway. However, cultural institutions still have problems with this. In his article Ellis takes us through a variety of means of bringing people together online and examines their relevance to the cultural heritage sector.

Kunstschaten Rijksmuseum in St. Pietersberg



Beschrijving: Reportage st. pietersberg, waar in een grot de kunstschaten van het Rijksmuseum tijdens de oorlog waren opgeborgen

Kunstschaten Rijksmuseum in St. Pietersberg



Beschrijving: Reportage st. pietersberg, waar in een grot de kunstschaten van het Rijksmuseum tijdens de oorlog waren opgeborgen

Photographs of Rijksmuseum art treasures stored at the St. Pietersberg during WWII, tagged by individuals on the Nationaal Archief Flickr Commons

One way of making heritage content more available is via Flickr the Commons. Both Shelley Bernstein (Brooklyn Museum) and Sebastian Chan (Powerhouse Museum, Sydney) are relative veterans of this system, having been two of the earliest adopters. In his interview for this publication, Chan talks about the input from the museum community as enriching links with the local population as well as providing information for the museum's online catalogue. For the Powerhouse, the web is seen as central to the museum's activities rather than something on the periphery or simply the responsibility of the marketing department. It listens and engages in the conversations happening online around its content, and is not afraid to adapt to the behaviour and needs of its visitors or respond with new technologies and means of communication.

Online content can also be offered to visitors on mobile devices. Lotte Meijer, a young Dutch new media designer, spent a year working for the Museum of Modern Art in New York, developing mobile services for visitors. In her article she talks about the various opportunities on offer to heritage organisations, referencing cases in the US. She also has a conversation with Nancy Proctor, Head of New Media Initiatives at the Smithsonian American Art Museum, Washington. Proctor was one of the driving forces behind a conference held at Tate Modern in September 2008 around handheld technology. She was also a keynote speaker at the DEN conference, where she co-led the Virtueel Platform workshop on smartphones. The article ends with some suggestions for how Dutch museums can adopt new services for their specific institutions, as well as for new institutions like the planned National History Museum in Arnhem.

Cathy Brickwood

Virtueel Platform

Museum 2.0

Nina Simon

<http://museumtwo.blogspot.com/>

Shelley Bernstein

[http://www.brooklynmuseum.org/
community/blogosphere/
bloggers/author/bernsteins/](http://www.brooklynmuseum.org/community/blogosphere/bloggers/author/bernsteins/)

in conversation with

Cathy Brickwood

Shelley Bernstein is Chief of Technology at the Brooklyn Museum. Since 1999 she has worked to further the Museum's community-oriented mission through projects including free public wireless access, podcast subscription feeds, cell phone tours and handheld PDAs. She is the initiator and current administrator of the Museum's web initiatives on MySpace, Facebook, Flickr, YouTube, and Twitter. In 2009, Shelley organized the Brooklyn Museum's exhibition, *Click! A Crowd-Curated Exhibition*. The Brooklyn Museum is widely regarded as being at the forefront of innovative use of social networking tools in the heritage sector.

Nina Simon writes the very popular Museum 2.0 blog as well as advising a variety of museums in the US and Europe how best to use new technologies. She has a background in museum exhibit design and has created interactive and participatory exhibitions at the International Spy Museum, the Tech Museum of Innovation, and others.

CATHY BRICKWOOD

How do you see the link between the online and physical experience of a museum?

NINA SIMON

Museums are progressing slowly: websites are still primarily used to plan the museum visit ('pre-visit'). However, increasingly museums plan the content part of the museum experience and follow it up online for a more in-depth level of information ('post-visit'). It's still too much using the online component as a wrapper for a one-visit experience and there needs to be a more pervasive relationship between onsite and online experience. There are a couple of ways of doing this. Instead of using your website as a single location you can embed your website in other locations on the web where people are having pervasive experiences – like social networks – or you can host more narrative experiences that connect people over time – like game or real time events that are continuing an experience. Some of these are in the museum and others are online.

One example of this happening outside the museum context is the extremely popular TV show *CSI New York*. The fans only have access to the TV show once a week. How can you let these people engage with the show more? In October 2007 there was a cliffhanger ending involving Second Life (you had to log in to track the murderer). I created a game that started where the show left off, allowing viewers to connect their once-a-week

TV experience with a more active, continual online experience. The game lasted for several months, during which players had to find things out and pass on clues, which were shown via Second Life and eventually resolved on TV.

Another area where this is increasingly used is in books. Using game cards and online communities has been proven a successful marketing and sales tool for children's book series. There are also examples of story books with embedded mysteries, that have spawned online communities of people trying to solve the puzzles. Some museums have done similar projects with a long tail of embedded narrative.

CB

Does this have an effect on visitor numbers to the museum itself, and on the frequency of visits?

NS

Absolutely. COSI's *Adventure!* exhibition is an experience that took ten hours to complete. It was wrapped around content that was very specific to that one experience. I have not seen many examples of this being done around a collection. Visitors to the Sony Wonderlab in Manhattan are given a ticket saying: these are exhibits you did see and these you didn't [<http://www.sonywondertechlab.com>].

CB

Is there a difference between the different kind of museums and the way they embrace new technology? It is sometimes suggested that art museums are behind science and technology museums in this respect.

NS

Art museums are often less innovative than science museums. Science museums don't tend to start from the authority issue, they're more about education and visitor experience rather than curating and this makes it easier for staff to experiment with new forms of interpretation. On the other hand what science museums don't do well is raise debates on contentious issues because they focus primarily on children.

SHELLY BERNSTEIN

There is more of a history of interaction in science museums than in arts museums. Art museums like the Brooklyn Museum have obvious concerns: art doesn't represent itself

SB

very well on the web; paintings represent themselves better, with sculpture you can't tell the scale, photography is less problematic but the kind of print or reproduction can make all the difference in what you see and experience. For us there's only so far we want to go. Ideally we'd like to see people come in and experience the objects on site but there are people online who will never come in because they live too far away. As far as we're concerned they are just as important as the physical visitor.

Because we have a small staff one of the challenges is doing projects that will work for both kinds of visitors. A case in point is the 11 artists' videos we made at relatively low cost with flip video and presented on iPod Touches in the gallery and we also posted the same videos on YouTube. One of first comments we received was from someone in the UK who produced video who thought it was innovative that we used flip video, but questioned why we didn't show more of the artwork in the videos. Each video starts with a quick pan of the piece, followed by a 3-4 minute conversation with the artist.

In the gallery – which is where this is seen the most by far – we hope the visitor has a personal experience with the artist speaking, and then we hope they shift from looking at the screen to looking at the piece of art while they listen to the artist. On the web, the audience does not have the benefit of seeing the work in front of them. The project just started, so I'm not sure if we did well enough for both audiences, but it was a way we could do the project and try and serve both.

CB

Handheld devices are increasingly used in museums. How do you see their potential?

NS

There are good examples at the San Jose Museum of Art (www.sjmusart.org) and the Tate Gallery using iPods. There's still a lot of experimentation to be done to see what balance of on-demand interpretative content is useful to get on a device versus how much it interferes with the core social experience in the gallery.

There are budgetary concerns. I am also not a fan of multimedia tours that force me to look at the small screen rather than at the objects on display.

NS

A classic case is the Getty Museum in the US that ended up using large arrows on the screens of their PDA tour to encourage visitors to look up at the art work itself.

CB

Museums and other cultural institutions are increasingly focusing on educational programmes and on young audiences. How does this effect choices about new media applications? Should you develop different tools for different audiences?

SB

With most of the things I work on we do not assume that the audience is all young and using social media. It's important with web projects never to make these kind of assumptions. If you do projects geared for kids you're dealing with a specific age group. Very few of our projects have been like that. We don't make assumptions about our audience when they come in the door so why do so in the online context?

NS

Unlike Shelley I get called in by museums to come up with a solution to a specific task. Often the first project that is done is simple and quite experimental. On the first day I often say: let's go and talk to some visitors. If you say for example that you want visitors to be able to talk, what does that mean to you? I often do projects with museums that are about building capacity through trying experiments. It often starts with something that is very basic. Some institutions recognise their inability to take risks but they can say to me: we'll give you a small budget and you can start experimenting with this stuff.

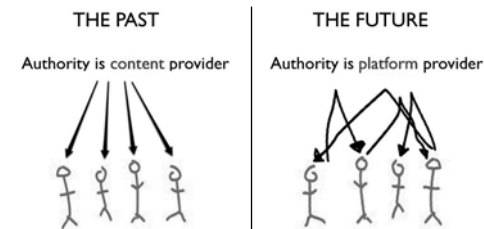
CB

How do you come up with new concepts?

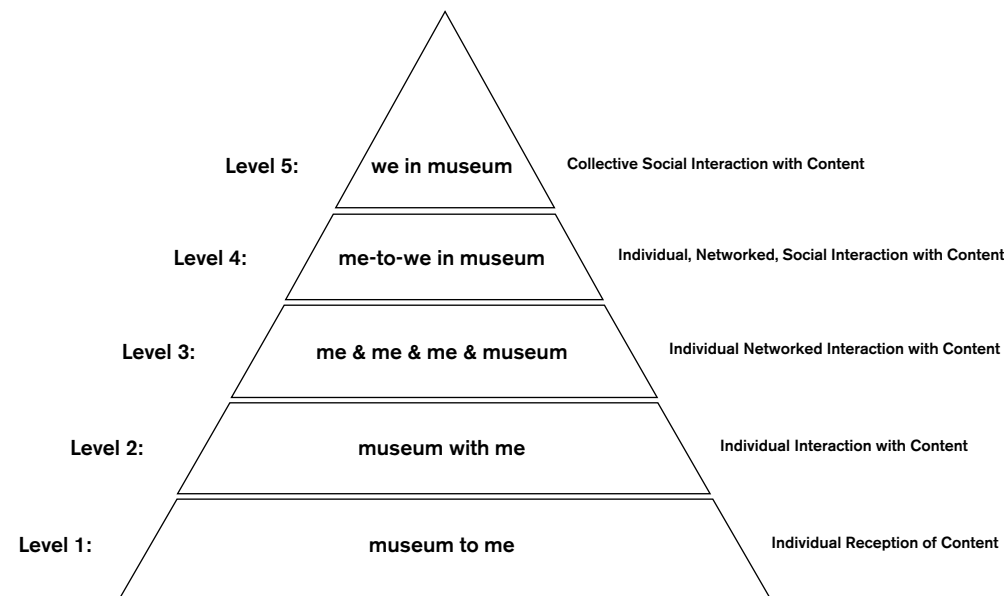
SB

It's a matter of keeping my ears open and filing stuff away and all of a sudden we're doing a show and I use one of those things I've filed away or sometimes a conversation with a colleague will just spark an idea. The other key requirement for us is that a project should

Illustration on Museum 2.0 blog



Hierarchy of social participation:



require a minimum of programming time. We tend to throw things out there and see how they work, then commit programming time if we see something is working. Also, I try never to predict where content is going to go because half the time I'll post something and I think it's boring, but all of a sudden we get 20 comments and people respond in ways I didn't expect. So, I guess a motto for us is 'just try it' and see what happens.

NS

I'm more systematic. I read blogs, tag interesting projects on del.icio.us, take notes. When I start working with a client I ask what kind of relationship do you want to have with your audience? What's in your comfort zone? If people are able to articulate what they want to achieve, stripped of any technology ideas then it becomes apparent what kind of tools become appropriate. The options are fairly limited. For example if you want to set up something where lots of people are adding things you need a wiki, whereas if you want to put out new content and have people comment on it you need a blog. When it comes to things that are more complex I have a strong vision of how you make these things happen physically in the museum with as little technology mediating as possible. I think that's mostly about being very clever and making creative connections based on what people are already doing in the museum.

CB

Are museums in the US learning from each other? How do they find good practice?

NS

There are 4000 people a week looking at my Museum 2.0 blog, but that's just one resource and the content is filtered through my judgement. I wish there were more people blogging actively about innovative museum practice. There is a small enough number of museums that a museum can find the shining stars pretty quickly. But a lot of museums go to web agencies that are not approaching the situation in the right way, not asking the right questions and the result is the museum often gets something very generic.

The American Association of Museums conference has a Media and Technology track

run by Nick Honeysett. The information is out there, but mainly features big institutions. Museums and the web focuses on technology and is mainly practitioners talking to each other and in that sense rather 'ghettoized'. As long as tech people 'keep to themselves', I don't believe they can do much to change the current state of museums. I'm more interested in changing the way museums relate to the public than what we can do on the web, so I prefer to attend events where you can speak to decision makers—the directors and the curators.

CB

Who reads your blog – the decision makers or the practitioners?

NS

It's a combination of people. The practitioners don't need to read my blog for the technical information, the technical level is very basic. Sometimes I get e-mail from someone very junior in a museum who is looking for help in changing things, and I also hear from the director of that same museum, but they don't know that the other is struggling with the same questions.

The US is seeing a growth of museum graduate programmes. While this is good for professionalisation it tends to promote a very specific way of doing things that is hindering creativity. When I started working in museums it was because all different kinds of people were working there. These days many junior people prefer not to take so many risks.

CB

What is your view on museums outsourcing Internet projects? At the Tate Handheld conference there were heated arguments between design companies and museum staff about the merits of outsourcing versus doing everything inhouse.

NS

Any project you're doing should come from the institutional mission and vision. Some firms can facilitate that. I often do one part of a project and leave a lot to the staff to carry on, checking that they go in the right direction.



Using the iPhone at an exhibition in the Brooklyn Museum

Recently the Netherlands saw the launch of the first Flickr the Commons website, from the National Archive and Spaarne Archive. What are your experiences with Flickr the Commons?

SB

There are a lot of issues. The Brooklyn Museum launched decently high resolution images in to the Commons. We believed that this was what Flickr was there for and this is what the Flickr community would have appreciated. On my blog I talked about the problems we had with our rights statement and the confusion it can cause. Ideally, there's a careful balance that comes into play—share as much as possible, but retain commercial rights which help fund the care and feeding of the collection. Most of these issues have been clarified, but it requires watching the landscape closely, adapting to the situation and being clear and transparent with the community as to what the give and take is. So, far that's working.

A key issue for us is the relationship you have to your community. The standard Flickr site worked well for us because it was very community based. We had between 1000 and 1500 people in that community and I knew all of them, knew roughly who they were, what they uploaded, etc. It was a very tight knit community. It was a community exchange. It was the best that you could want from a Web 2.0 site. What happens with the Commons was that there is a lot of traffic, it floods out everything else with so much chatter. We have trouble maintaining the account the way we used to.

NS

There's a difference between using Flickr in a community capacity and using it in a collection distribution capacity. The former requires very different levels of engagement. Small institutions like the New Mexico photography collection of John Collier Junior [<http://americanimage.unm.edu/>] were thrilled to get more views for their photographs through Flickr Commons. There are two different mentalities and both are ok.

SB

It was an easy discussion for us at the time of the launch because we thought the materials we had would be interesting for our current audience. I fought not to split the account



Brooklyn Museum Archives. Goodyear Archival Collection. Visual materials [6.1.016]: World's Columbian Exposition: Ferris Wheel, Chicago, United States, 1893. View of Ferris Wheel, [which dwarfs surrounding buildings,] Sept.; Starks W. Lewis, Amateur, Brooklyn, N.Y. Image 2194.



Brooklyn Museum Archives. Goodyear Archival Collection. Visual materials [6.1.016]: World's Columbian Exposition: Ferris Wheel, Chicago, United States, 1893. View of Ferris Wheel, [View through support wires from one gondola to gondolas opposite]. Sept.; Starks W. Lewis, Amateur, Brooklyn, N.Y. Image 2193.

because that would split the audience. But what we found when we put all the new material on the site was that the existing audience really had trouble relating to the Commons material and the people on the Commons – cared more about the materials and less about the community at the Brooklyn Museum – it was very disjointed. The example of the Powerhouse Museum in relation to community and Flickr Commons indicates that it may be the case that having a photo collection that is very linked to the locality changes that balance. They do locally focused uploads and this attracts a more local audience. Much of our issues around disconnectedness changed recently when two lovers of the Commons created a group on Flickr so that collection managers and community members could really start talking about the materials and the institutions behind them. That changed the balance dramatically in a good way. Now, we find, there's a better balance. The people who love the Commons material are getting to know the people who love the Brooklyn Museum and this community is starting to really gel in a way it had not before.

CB

What are your views on large companies like Flickr, Google or Amazon organising such public content?

NS

This is an important issue, and I've discussed it recently with a group of librarians. Someone raised the controversial question: Why don't we close down libraries and make Amazon accounts where people have better search options and can get any book? It's a problem that affects libraries more than other organisations because they deal with non-unique commodities.

Libraries have a more direct service role and have recently started services with, for example, instant messaging: You can text a librarian at any time for advice while in the library. Another issue is personalisation: in a library you're not expected to look at the whole collection, unlike in a museum. The library in Haarlem Oost designed by Jan Hanrath has done interesting things with tagging in a very innovative way. Seattle public library now

also has a live continuous feed of what is being checked out, which I find ironic because there is always a sense that what books people take out is a private issue. This is about openness but not individual information. Libraries have their own problems, but they are good models in some ways for the kinds of flexibility and personalisation that museums should consider.

Nina Simon and Shelley Bernstein were two of the keynote speakers at an event called *Kom je ook?* that took place in Amsterdam in November 2008 (<http://www.mediamatic.net/page/48433/en>).

Getting People Together

Mike Ellis

<http://electronicmuseum.org.uk>

Mike Ellis worked for 7 years as Head of Web for the National Museum of Science and Industry, UK, which comprises the Science Museum in London, Media Museum in Bradford and Railway Museum in York. He now works for a Bath-based company called Eduserv who are a not for profit IT services group. Mike's interests are in user generated content, Web 2.0, ubiquitous computing and innovation and how to leverage these for maximum benefit in cultural institutions.

The web has always been about content. Commentators have recognised this simple fact for as long as the web has existed: technology comes and goes, but the importance of content stays the same.

At the heart of so called 'Web 2.0' is something which has content at the heart; a very personal need to enrich *connections between people* and the content that they share.

This essay isn't about the web – not really. It's about some of the ways in which the web can be used to bring people together – (yes, together as in 'in the same room') – and then the ways in which the web can be used to help keep those people in touch.

Maslow's 'Hierarchy of needs'



1 http://www.online-information.co.uk/online08/seminar_description_ims.html?presentation_id=442.

2 http://en.wikipedia.org/wiki/Maslow's_hierarchy_of_needs.

Back in December 2008, I gave a talk¹ at the Online Information conference in which I drew parallels between the social web and Maslow's hierarchy of needs.² The talk itself focused on the fact that I believe 'Web 2.0' – or as I prefer to call it, 'the social web' – is important because it calls to basic human needs. 'Love / belonging', 'esteem' and 'self actualisation' – the top three elements of Maslow's triangle – all are bolstered by intimacy, creativity and community: key elements of the connectedness of the web, and some of the main traits of the social web.

The social web is successful – and I believe will increasingly become bedrock for more and more online experiences – because it helps us connect with others. On simple levels, this connection long pre-dates the notion of Web 2.0: e-mail, bulletin boards, IM (instant messaging) are ‘old’ technologies, but continue to thrive purely because they are on some level important to people because of these connections.

This essay will examine two ‘real world’ events – non-virtual, ‘bricks and mortar’ events. These events have had at their heart some of the fundamental aspects of the social web: interactivity, creativity, openness, honesty, sociability, experimentation. The fact that the events happened to revolve around technical subjects is for all intents and purposes immaterial: really the only impact this has is that the use of the technologies is more natural in the participants’ lives. In time, this will likely become the way for everyone.

The events

I put together these events during 2008. Although both were for similar audiences (reasonably technical, and with the web as their focus), there the similarity stops. The first of these (Mashed Museum 2008³) – was very quick to put together, very cheap and involved a small number of people. The second (BathCamp 2008⁴) was an entirely different affair which had around 50-60 participants and required months of planning and a considerable sum in sponsorship to support it.

³
<http://mashedmuseum.org.uk>.

⁴
<http://bathcamp.org>.

1: Mashed Museum 2008

The first event we’ll look at was a ‘mashed museum day’ held in June 2008.

The notion of a ‘mashup’ is fairly well embedded for web developers – it is essentially a rapidly hacked-together prototype which takes different data sources and services to deliver something new and innovative in some way. Mashups can be produced quickly, cheaply (usually for free) and demonstrate new – usually innovative – ways of presenting data or content.

Mashups are particularly interesting in a museum context. Here, the traditional focus has been on making sure object and exhibition data is curatorially checked and 100% correct. Mashups tend to focus on innovation in displaying and ‘munging’ data, considering it from different, less traditional angles.

I wanted to take the energy, experimentation and freedom that are represented by mashups and give the day this flavour. I introduced the Mashed Museum day as follows, using Google Docs and Groups (see below) as collaborative tools to help me organise the event.

‘You are invited to a day of coding, thinking and idea sharing with a select group of museum colleagues.

Mashed Museum 2008 will be a day of free-form thinking and doing with only enough structure to make sure we actually get something out of the (considerable) collective brainpower in the room.

The day aims to give us an environment free from political or monetary constraints. The focus of the day is not IPR, copyright, funding or museum politics. Our energies will be channeled into embracing the “new web”: envisaging, demonstrating and (hopefully) building some lightweight distributed applications.’

The main thing I wanted to get across about this day was that it was to be about rapid development, experimentation and freedom.

The specific audience for the event was a group of museum web developers. Around twenty people came along. Eduserv provided sponsorship for refreshments; we had free access to a large, networked room from Leicester University for the whole day.

The day itself was loosely structured – we wanted to give just enough shape to it to enable people to collaborate effectively but not too so much that people felt restricted. Towards the end of the day everyone was given the opportunity to present what they’d produced during the day. Again, we did this as informally as possible – beers were distributed and concepts presented at people’s desks.

During the day, I circulated with a Nokia N95 phone and did brief video interviews with those people who had produced something.

After the event, I updated pbwiki (see below) and blogged about what had gone on, and also produced a quick video cut of the interviews I’d carried out. You can see this, and read more about the outputs of the event on my blog.⁵

⁵
<http://electronicmuseum.org.uk/2008/06/27/mashed-museum-2008/>.

Feedback for the event was very positive. There were some minor issues – for example, we had no mobile coverage in the room and a couple of the mashups had to be altered to take this into account. There was also the interesting question of ‘how do I take what I’ve done back into my institution?’. This is an ongoing question that hasn’t been answered: one of the most common bits of feedback was that part of the reason the day was positive was because of the collaboration, and ‘being away from my inbox’. Giving mental space to people – it turns out – is possibly as important as the actual format of the event itself!

2: BathCamp

BathCamp was a 'BarCamp'⁶ we ran over a weekend in September 2008. We began planning BathCamp in April 2008 and although the effort was clearly focused towards the latter end of this time period, the 4-5 month span will give you some idea of the complexity of this event.

A 'BarCamp' is a 'participatory unconference' which loosely means a conference with a defined shape (in our case, 40-minute talks given during a 24 hour period) but an undefined set of topics or speakers. The unwritten rule of barcamps is that everyone pitches in: if you follow the strictest of BarCamp rules, you aren't allowed to even turn up without giving a presentation, but we were slightly more relaxed about this, encouraging speakers but not forcing people to take part.

The initial idea of a Bath-based BarCamp (an idea which was born during a drunken moment in a bar at a conference in Vancouver...) was taken forward by a small group of enthusiastic people who collaborated at first using Google Groups. Over time we expanded this group slightly, but also set up mailing lists for the local tech community.

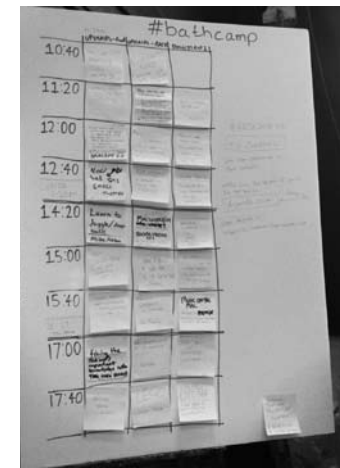
Geeks are reasonably easy people to target with marketing: they tend to lurk on similar mailing lists and around similar events. The notion of a BarCamp within this community is fairly well embedded, and the local nature of the event helped in terms of encouraging attendance.

Because the BathCamp event took place over a period of 24 hours, we needed a venue, accommodation and refreshments. We therefore went to local firms and contacts, and managed to raise around £3,000 to pay for the event. All the people coming to the event paid £5 each: nominally this was to cover the cost of special BathCamp t-shirts, but in reality it was also a sum which we hoped would encourage people to come along. A free event is much easier to make excuses for!

The talks themselves were incredibly diverse. The way a BarCamp works is that there is a time grid which is presented to participants when they arrive. It divides the day into slots (in our case, 40 minute slots): people then write the topic name on a Post-It note and stick it to the relevant slot. It is also important to note that barcamps work much better if there are at least 3 concurrent streams. This gives users the chance to pick and choose what they'd like to see.

On the next page, our BathCamp board once it had been populated.

6
<http://barcamp.org/>.



BathCamp board 2008

For the most part, we (the organisers) just left the participants to arrange the timetable on their own: there was some minimal shuffling to ensure an even spread of talk 'types' and also to fit in with the days' refreshments.

You'll probably notice two things from the image above: one, this is clearly a lo-fi setup, and two, that the range of talks was considerable, from juggling to Django, from the technology of archaeology to coffee making. This is part of the joy of an unconference: the serendipity and variety of the presentations.



Presentations during BathCamp 2008

Interestingly, the lo-fi aspect was something which troubled me at first. I thought about various ways of displaying this board on the web, on mobile devices or print-outs. I even put together a simple SMS system which allowed people to 'buddy' each other. The reality of course is that these things just don't work in an un-conference environment. Not only are they harder to set up and maintain, but there is also something very powerful to be said about the collaborative effect of participants crowding around a physical, hand-drawn timetable between each set of talks.

Now we've looked at the events, let's examine some of the services and tools available to support the arranging of these kinds of events.

The tools

We used a hefty combination of online tools for the organisation of these events. BathCamp, being by far the more complex used most (if not all) of the list below. Mashed Museum used rather less.

Here is an overview of some of the main tasks and tools:

- For *lightweight project management* tasks (delegating and sharing tasks and deadlines) we used 'Basecamp'⁷, a free (unless you upgrade for additional functionality) online system. <http://www.basecampHQ.com/>.
- For *sharing of collaborative documents* such as letters to sponsors, timetable outlines, etc. we used Google Docs⁸. Again, free – and a very easy way of sharing and collaborating with Word-like or Excel-like formats. <http://docs.google.com>.
- For *alerting and discussing* among the core group of organisers, we used Google Groups⁹, a simple mailing list. Another free tool. <http://groups.google.com>.
- For *sharing of non-collaborative documents* such as logos and flyers, we used Box¹⁰ and Dropbox¹¹. Again, free for limited use. <http://box.net>.
- For gathering e-mail addresses of potential participants and for sending out of regular news bulletins to these people, we used Campaign Monitor,¹² a professional online service for sending e-newsletters. This is a paid service; however, we negotiated a sponsorship deal whereby we displayed their logo on our e-mails in return for free 'sending credits'. <http://campaign-monitor.com>.
- For *capturing the final participants list*, and also for billing purposes, we used Eventbrite coupled with PayPal. This is a service which is paid, but by a fixed sum per ticket sale. <http://eventbrite.com>.
- For alerting people and keeping interest in the event high, we used a standard hosted version of Wordpress¹⁴ for blogging and Twitter.¹⁵ We also bought the domain name <http://bathcamp.org> and used the free Google Apps¹⁶ system to manage e-mail accounts on this domain. Ditto, we set up a Facebook BathCamp group and invited friends. Most importantly, we made extensive use of the microblogging tool, Twitter for rapid alerting. <http://wordpress.com>.
- For information following the event – we used a mix of pbwiki¹⁷ (a simple, free, hosted wiki service), Flickr¹⁸ and our own website. <http://twitter.com>.

There is one other main tool worth mentioning which we have brought into the mix following the BathCamp event to manage ongoing evening events. This is from <http://www.ning.com> and is invaluable for quickly setting up a social network, managing users, discussions, e-mail alerts and so on.

The collaboration required was of course surrounded by large number of regular meetings to discuss next steps, budgets, tasks and so on...

7
<http://www.basecampHQ.com/>.

8
<http://docs.google.com>.

9
<http://groups.google.com>.

10
<http://box.net>.

11
<http://getdropbox.com>.

12
<http://campaign-monitor.com>.

13
<http://eventbrite.com>.

14
<http://wordpress.com>.

15
<http://twitter.com>.

16
<http://google.com/a>.

17
<http://pbwiki.com/>.

18
<http://flickr.com>.

The simplicity of good technology

People who are too close to this stuff – for example web developers or project manager – often miss the fact that it is simple stuff which works best. Web developers, for example, love 'features'. They're addicted to buttons and complexity. They even have a rude phrase for people who don't understand the things they build: 'PEBCAK' (Problem Exists Between Chair And Keyboard).¹⁹

What they often don't focus on is that the important thing with technology and processes usually work better when they are *invisible* – as slick, intuitive and non-invasive as possible.

Here's what Tom Standage, author and technology commentator says:

'If you look at the telephone we don't really have either enthusiasm or scepticism for it now. It's just become invisible and that is the sign of a mature technology: you don't notice it's there any more.'²⁰

As people get used to this as a concept, the sites and services available naturally tend towards usability and simplicity. And as they do this, more non-technical users are finding that these services are truly useful in helping to foster and create *offline* relationships and experiences.

Having said this, many of these tools are quite impenetrable at first. Many of them – as you will have seen – are free from a financial aspect. This doesn't necessarily mean that they are free from a time aspect. Knowing which to choose and how to use them most effectively together is a bit of a black art, and really comes from personal preference and practice as much as anything else.

Live coverage

There were elements of both events which constituted live coverage. Events that have this element are often described as being 'amplified'. There are many ways of doing this, and the landscapes and technologies are changing all the time, but there are some techniques emerging.

The first of these, and arguably the most important, is more a kind of 'meta-technique' which is used to bring together the disparate public elements of these kinds of conferences. Simply, it's the use of a unique 'tag' or 'hashtag' which is attached to blog posts, tweets, documents, images and so on whenever the event is mentioned.

This allows the technologies and people involved to see and search for aggregated views of all mentions of this particular event. Take BathCamp as an example. Because we used (and

19
<http://en.wikipedia.org/wiki/Pebcak>.

20
http://www.open2.net/digitalplanet_learning-zone/cybertalk_script.html.

publicised) the tag *bathcamp08*, you can search for the event as follows:

- Google Blog search: <http://blogsearch.google.com/blogsearch?&q=bathcamp08>.
- Flickr Image search: <http://www.flickr.com/search/?q=bathcamp08&m=tags&z=t>.

There are also some technologies (I am developing one called OneTag²¹) which can be used to aggregate this content together, and display on web pages or via RSS feeds.

21
<http://onetag.org>.

For the Mashed Museum event, we briefly used a mid-range webcam and the free video streaming service Mogulus²² to broadcast live to anyone who cared to join us. This is free, but requires reasonable bandwidth – and, more importantly – a reason! We found few people watched the stream because (in this instance) this was a ‘had to be there’ event rather than anything which could really be participated in remotely. Similar free technologies exist for streaming audio, but again should be considered carefully in the context of the particular event.

22
<http://www.mogulus.com/>.

Tweeting and Blogging during events is common, particularly the former. There is also a system called CoverItLive²³ which lets event delegate contribute to a continuing stream of chat about the event – the ‘backchannel’. These kinds of systems can also be set up to gather feedback or questions for a speaker. It is of course also possible to hook these systems up to SMS so that messages or questions can be sent in by text on a mobile phone.

23
<http://coveritlive.com>.

Conclusion

Really, the important point for me is that there is no conclusion: this is a rapidly changing space where formal conferences are being joined by different formats. Working out which of the various formats works for a particular audience and subject is absolutely key – ditto, choosing which technologies to use in a particular context.

As time goes on, we will undoubtedly see many things changing in this space: most likely, however, we’ll see an increasing overlap of online and offline experiences, where the ‘pre-event’ merges into the ‘during’ and ‘post-event’. As mobile and web technologies become more powerful (and more invisible!), these events will increasingly spread beyond their physical presence and onto the web.

Here, we’ll start to see on-line and off-line audiences engaging more closely with the content and with each other. The focus of the ‘social web’ will become as much about the bringing together of people into physical spaces as it currently is about virtual ones, ultimately blurring the edges between what ‘physical’ and ‘virtual’ actually means.

A word tree visualisation of maritime memorials using IBM's Many Eyes, starting with the word 'Lost', produced during workshop Mashed Museum 2008.



Making Content Social

Sebastian Chan

<http://www.powerhousemuseum.com/dmsblog/>

in conversation with

Angela Plohman

<http://www.baltanlaboratories.org/>

Sebastian Chan is the Head of Digital Services & Research at the Powerhouse Museum, Sydney, Australia. Coming from a background in social policy, journalism and media criticism as well as information technology, he has been building and producing websites and interactive media since the mid 1990s. At the Powerhouse he has been responsible for driving a strong user focus in design, usability and content, as well as expanding the scope and reach of the museum's suite of online projects. His other interests include electronic music and digital art, and he has directed and curated large scale national and international events and festivals, and also produces related media from radio broadcasts to print.

Angela Plohman is the Director of BALTAN Laboratories, a new art and technology laboratory based in Eindhoven. Previously she was programme officer at the Daniel Langlois Foundation for Art, Science and Technology, Montreal; a freelance writer, project manager and researcher for a number of international media (art) organisations; content developer at LabforCulture.org; and project manager and content developer of the new Van Abbemuseum website.

The Powerhouse Museum in Sydney, Australia is one of the most pioneering museums worldwide investigating and using social technologies in the museum context, having consistently committed to developing innovative online projects that engage and involve their visitors and users on a global scale.

In 2006, after two years of research and experimentation based on the premise of the museum as a collection of experiences, rather than simply a collection of physical objects in a physical space, the museum put 70% of its collection online in a new collection search that allows users not only to search through the collection but also to tag items, adding their knowledge and experiences to that of the museum.¹ The focus is on simplicity and serendipity, encouraging users to get lost and discover new things as well as enabling easy access to what people are searching for. Within six months of the launch, website traffic tripled, expanding the audience from mainly local/national to global. In the first few months after the collection search went online, 95% of all available objects in the database had been viewed, despite the team expecting a smaller number of best-known works to be the main objects of interest. They discovered that they were able to cater to minority tastes in a way that would have been impossible through the museum's exhibition policy but that is completely feasible online.

¹ For more information, see: Chan, S., 'Tagging and Searching – Serendipity and museum collection databases'. <http://www.archimuse.com/mw2007/papers/chan/chan.html>.

The Powerhouse had previously tested out the social side to the system on a smaller scale through an electronic swatchbook project that allowed fashion students to tag individual pages from these books online, providing a whole new layer of information to the books as a whole. Previously, digitalisation of museum collections was driven primarily by preservation but now it's all about access. Browsing has become more important, likened to the experience of wandering in a library where you may chance upon a book by accident. The library model has become more about social space, similar to the supermarket model – what else do I want? Audiences use museum content much differently than is expected or than what may be desired, but these experiences can only enrich what is done with collections.

Over the years, the Powerhouse has moved from having a web site to having a web presence, with its content found on multiple other social websites (such as Flickr, where the Powerhouse was the first museum to add their content to The Commons on Flickr; Facebook, where the marketing department of the museum maintains pages for different events; or YouTube, where the museum has been active since 2006). Communities form around the content and they communicate back, providing the museum with extremely valuable feedback and information about its own collection and activities. This allows the museum to bridge the semantic gap, i.e. the difference between curatorial (top down) terminology and audience (bottom up) understanding and meaning. By making its content social and engaging with other online projects, the museum is able to improve its work – designing better exhibitions, writing more accurate wall texts and labels, and benefiting from the knowledge of the community in the research of its own collection.

The Powerhouse's web presence is extensive, and not only in relation to its collection. It maintains several blogs, some targeted at professionals (such as Seb Chan's own fresh + new(er) blog) with others more general and public-facing, such as the *Walking the Wall blog*, a travel diary that accompanied a Powerhouse exhibition on the Great Wall of China. The Sydney Observatory also maintains a blog that is twice as popular as the Observatory's own website. The Powerhouse has made a separate website for children after realising that it was too hard for children to navigate the main site. On this site, they use a Creative Commons licence that allows children to, for example, download and play with reproductions for free.

For the Powerhouse, the web is seen as central to the museum's activities rather than something on the periphery or simply the responsibility of the marketing department. It listens and engages in the conversations happening online around its

(Below and right) Swatchbook project site of the Powerhouse Museum, <http://www.powerhousemuseum.com/electronicwatchbook/s/>



content, and is not afraid to adapt to the behaviour and needs of its visitors or respond with new technologies and means of communication.

Sebastian Chan is currently the Head of Digital Services & Research at the Powerhouse Museum. Coming from a background in social policy, journalism and media criticism as well as information technology, he has been building and producing websites and interactive media since the mid 1990s. At the Powerhouse he has been responsible for driving a strong user focus in design, usability and content, as well as expanding the scope and reach of the museum's suite of online projects. He is known as a cultural sector specialist in social media and Web 2.0 applications, as well as web analytics. His other interests include electronic music and digital art, and he has directed and curated large scale national and international events and festivals, and also produces related media from radio broadcasts to print.

Chan was in Amsterdam for two events in September 2008, including a Masterclass for museum professionals on the application of social media in museums, organised by n8 in collaboration with the *Nederlandse Museumvereniging* and *DEN* on the occasion of the Open Museum symposium at *PICNIC '08*. Virtueel Platform had the chance to speak to him more in depth about the Powerhouse's pioneering activities and future plans.



The Powerhouse

ANGELA PLOHMAN

How does the Powerhouse compare to large US museums which are also very active in using social networks?

SEBASTIAN CHAN

The Powerhouse prides itself on being Australia's key interactive museum, and has been doing so for around twenty years. A new director has just started at the museum and there are big plans for reorganisation. The bottom line remains that enough people have to come through the door.

In Australia (as in most of Europe, but unlike in the US) museums are answerable to government as they are funded by government. We have to be accountable and also count the number of visitors we attract. The government also places restrictions on what you can do (this has consequences for new media projects in museums, e.g. how do you deal with social software, legal issues). It is hard to compare – Govt also gives limitations on what you can do. The Powerhouse is a state museum, with a mandate to that level of government, it is also important to note that it does not have a mandate to the local city. Some smaller museums in the US are visited primarily by a very local audience. Sydney is not a dense city (and thus cannot easily summon up a direct community interest).

The Powerhouse currently has large web department, with a small core of three people. There are extra staff for national research and state cooperation (extra funding for these). Because the Powerhouse is part of a network of museums, the technology and data can all be reappropriated for use in the broader network.

AP

You mentioned that most of the web team at the Powerhouse are artists and musicians. How does this affect the work of the department?

SC

There are side benefits with a team engaged with other forms of media. Musicians, for example, have an understanding of audiences and how they engage with arts. An audience creates its own energy at a show. Museums can learn from this. Visual artists are open to new

ways of presenting material. Also, it means that the team is creative outside of their work which makes them great to work with.

AP

What the Powerhouse has accomplished within its web services department is incredible. But what do you do when there is just a single person responsible for the web presence, not a whole web team?

SC

Smaller organisations have more problems. Unfortunately the big survive and dominate the web, the promise of Web 2.0 is built on the myth of small becoming big. Flickr's Commons project works because it's big. In the Netherlands Hyves is big. Our experience with national federated collections shows small museums can go along with big museums, but that the benefit of 'big' is the exposure to a bigger audience.

AP

Is it really a question of size or do you think it's more about the whole museum seeing the web as integral to every aspect of its activities?

SC

It is about seeing how your content and expertise, your knowledge, can fit into the overall ecosystem of the web. If you do this well then even a very small specialist museum can have enormous reach – indeed, often those who are already specialist cope better. Those more generalist museums like the Powerhouse – a museum that covers an enormous breadth of human creativity from trains to shoes – struggle.

AP

How does the Powerhouse link between its rich online offerings and the physical gallery experience (audio tours, other manifestations of the digital)?

SC

This is an area that the museum still needs to work on. Currently the gallery experience is pretty much separate from the rest of organisation, including the web Services. However, the web is increasingly permeating all parts of the organisation.

Making content social

AP

You have referred several times to the notion of making content social rather than talking about specific technologies. Why is this important for museums? And is this something only to be pursuing online?

SC

Making content social is more interesting than putting technology first. It's all about opening up and sharing. The cultural sector doesn't have a business model for that. But this is justifiable. At a recent seminar in the UK for Culture24 (www.culture24.org.uk) I was struck by the situation in the UK where museums have free admission. For the museums this has created great opportunities – people visit more frequently – but it hasn't been without its problems. It has put pressure on the web Units in museums to come up with business models that generate income (since this income is no longer available from admission fees).

This favours the 'global brand' museums such as the Tate and V&A. But take that away and smaller museums are no different.

AP

You pointed out that the museum now has less of a monopoly on interpretation and authority in these social media scenarios. Do you see this as one of the main challenges as the cultural sector tries to adopt these new strategies?

SC

Not a challenge, more a statement of fact.

We can bury our head in the sand and tell ourselves that Wikipedia or whatever we don't 'like' doesn't exist or is 'not accurate' but it doesn't change the facts that a significant proportion of our audience is now also using/reading/listening to these media.

Better that we engage and learn. It always strikes me as odd that research staff will complain about the accuracy of Wikipedia and go to great lengths to find errors, but never think about actually fixing the errors that they do find – and thus improve it for everyone!

'Knowledge is power' is still very relevant except that sometimes we get confused with

the difference between information and knowledge. Museums and others have plenty to contribute knowledge-wise but we have to start going beyond 'just information'.

To be truly knowledgeable you need to be able to effectively communicate your knowledge.

AP

Are there particular dangers in community-based projects?

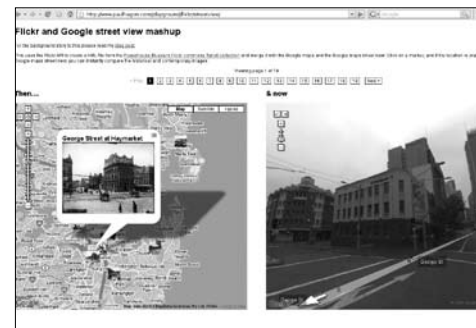
SC

Community based projects can be dangerous – simply because they involve multiple voices, different perspectives, and, well, 'other people'. As Sartre wrote 'hell is other people'. Of course, we can't be so negative but it might sound strange to say this but museums work well with irregular visitors, but regular repeat visitors can pose problems – mainly because, rightly, they take 'ownership' of the museum. They are often more demanding and less tolerant of problems. But online the regular visitors are a blessing. These are not new problems for museums. We have to keep reminding ourselves that only a small fraction of the population (in Australia) actually visits museums and so we're not built to cater 'for everyone'. We need to be mindful that the 'old ways' suited a relatively distinct elite audience and an education/learning oriented audience, and if we want to reach out to new audiences, we need to change our ways to accommodate their differing expectations of who we are, what we do, and why.

Since our collection has been opened up to the general public the curators have been inundated with questions and they can't handle the demand. We need systems to manage this demand. Social media scales well but one to one customer service doesn't. This paradox is incredibly important to remember.

AP

Talking about blessings, on your blog you recently posted a two-part interview with Bob Meade, an amateur blogger and tagger and one of the most active contributors to your content on Flickr. This is an incredibly insightful piece for museums trying to evaluate how and why its regular visitors would want to be engaged with collections online. Bob Meade seems to



Mash-up between Google Street View and the Flickr Commons photo collection of the Powerhouse Museum, created by Paul Hagon, <http://www.paulhagon.com/playground/flickr/streetview/>

feels a strong sense of ownership, as well as responsibility for this content. Having the opportunity to be able to comment online or tag, made him think 'hey, I know something about this. I think I might put that in there'. How did your interview with Bob Meade enlighten your view on the users of the tools you are developing?

SC

It seemed the obvious thing to do. Here was someone who was investing a phenomenal amount of time and energy helping us out. The very least we could do was to acknowledge him and then try to learn more about his motivations.

Like any audience research, these sort of qualitative interviews are really important in informing us of future directions, opportunities.

Listening is a pretty critical social skill to have – even if you are a bureaucracy or corporation.

AP

In your blog, in a post about the book by Charlene Li and Josh Bernoff's *Groundswell: Winning in a World Transformed by Social Technologies*, you make a key point about audience by saying that 'even here at the Powerhouse we've had social media projects fail because we have over-estimated our intended audiences and their predicted behaviour'. How can museums effectively develop projects that meet their target demographics (or technographics)? Are there enough Bob Meades out there?

SC

It is a combination of experimentation, low-risk pilot projects, and audience research. What we are doing at the Powerhouse is balancing what used to be an almost entirely 'supply-side' attitude to the content we made available ('we have this stuff that we think is interesting so here you go') with a demand-side element ('ok so you want to see this as well, we've got one of those, here you go').

Being more responsive to audiences and visitors, and citizens means tempering our strong desire to show what we want to show,

with an improving understanding of what citizens might be interested in. Now on the web this is really much easier than in our galleries – we don't have to have 'limitations' as a result of space etc. We can have everything in multiple places simultaneously in the digital space – so why not take advantage of that?

There aren't that many Bob Meades out there. But there are a lot of people who from time to time exhibit a similar level of enthusiasm – its about finding them and providing the right context in which their knowledge, skills and interests can align with the museum.

The Commons on Flickr

AP

The Powerhouse museum was the first museum to put its collection on The Commons on Flickr. You mentioned that digitalisation was previously driven by preservation but now it's about access, and that you see the museum as a node in a network of other sites, a publisher with multiple channels. The Commons, as a global, collective project, exemplifies this perspective. How has participating in The Commons enhanced the Powerhouse collection?

SC

What it has done has make citizens aware that the Powerhouse holds quite a significant set of photographic heritage. As a museum we haven't done many photographic exhibitions and these images have been, for the most part, only known to those who are in the research community. Now, they are there for others to explore and play with – and as such they are reaching many new people.

AP

The Netherlands has recently contributed for the first time to The Commons on Flickr with photographs from the Dutch National Archive. In the first two weeks since the archives have been on The Commons, the images have been viewed over 400,000 times and more than 400 comments have been added. What do you see as the most exciting aspect of this collective effort? Why should more museums be opening up their collections online in this way?

SC

Access and engagement. I think that that

volume of traffic highlights the enormous latent interest in these archival materials. People just haven't known that this sort of material is available for them to see, let alone use. If they did then they've always had to struggle with our archaic search tools on our own websites which has meant they have only had appeal to 'serious' researchers – and, frankly, there are not enough serious researchers out there in the world to maintain and fund archives, museums and libraries.

AP

Going back to your interview with Bob Meade, he talks about using the content online that he finds (in this case of the National Archives of Australia), and he states that he regards these collections 'as my heritage and everybody else who's here. And also it should be available for research from overseas as well. So yeah, I think it's my right to use it . . .' Do you think that this is what drives people to engage with these collections online in general?

SC

Not yet but I think that as more citizens become aware of what museums hold and preserve in trust for them, this attitude will become more prevalent and we will be able, as institutions, to use it to press funding bodies, philanthropic and governmental, for more adequate levels of financial support. After all, the biggest cost for a museum is actually the preservation and research of objects that aren't on public display.

Making our collections more accessible and placing them in online locations where citizens happen upon them is only a good thing.

Who are we doing this for?

AP

Are you designing for regular museum visitors? Do they actually want all this stuff?

SC

What is a regular museum visitor now? 85% of our online visitation comes via search engines. About 20% of this traffic is looking for us, the rest is looking for an enormously diverse range of content that we just happen to have references to. In the last 12 months there have been nearly 700,000 different search



Collection of Powerhouse Museum photographs at the Flickr Commons, http://www.flickr.com/photos/powerhouse_museum/

phrases that have led visitors to our website – and that’s a hugely diverse audience and range of visit intentions.

Museums used to have monopoly on information about stuff. Art museums have always been about experiences and interpretation. But science museums are not just about interpretation – they have, traditionally, been seen as trusted sources of ‘factual’ knowledge. Science museums are in a competitive environment now – with each other all over the globe, as well as with non-museums like Wikipedia. At the same time our physical spaces are now becoming more experience oriented. The experience economy is a big challenge. With other cultural fields you can adapt more easily to this new world, e.g. a performing arts company can change their programme. A museum with a collection can’t do that so easily.

The social web is about expression and social communication but in our physical spaces that aspect is more hidden. You can learn a lot from the web about potential audience.

AP

How do you track the success or failure of these online initiatives?

SC

We build in a fair amount of evaluation and review into our projects and we work very much with an iterative development approach – launch early before it’s completely ready, then iron out the bugs, add new features once we have actual people using the sites.

We also take a reasonably advanced approach to web metrics and analytics. We know that museums, generally, don’t make good use of web analytics tools nor do they really leverage the data they are gathering. We’ve been working to get more value from what we know and can learn about our users, visitors, and audiences.

Of course, it isn’t just about the numbers – really the only thing that matters is what insights you can get about your visitors so you improve your services in line with their needs. This gets lost when museums ‘compete’ over how many ‘millions’ of visitors they get online.

In fact I think the huge numbers that we’ve all been historically reporting are becoming a terrible burden.

They hide the reality that a great proportion of these ‘visits’ are not from human users, and they stop us from asking the right questions of our data.

AP

What new areas of development is the web services department of the museum working on now? What makes the Powerhouse’s experience and approach unique in the world of Web 2.0 and museums going social?

SC

The Powerhouse is currently focussing some attention on developing geo and mobile pilots. One key thing is that no museum should do the location-centric/geo-aware projects by themselves – it just makes no sense. A future user on their mobile device out in the world won’t just want one single institution’s dataset – they will want to compare, contrast and explore multiple datasets. Imagine if the local gig guide only had information on one chain of venues, or one type of music?

We’re five years away from these kinds of things getting mass appeal so for now it’s just a pilot. But you have to have your content ready now. That is the basis for experiments in this area.

We are also heavily investing in experimental work to make the connection between the gallery and the web far more seamless and the borders more porous between the two. There are several projects we will be launching during 2009 which will finally realise the potential of the collection documentation and search tools we’ve got on our website, within the galleries as well.

Museums and the Mobile Web

Lotte Meijer

<http://www.lottemeijer.com>

Including a conversation with

Nancy Proctor

<http://americanart.si.edu/>

Lotte Meijer develops strategies and products to engage visitors with museums, both onsite and online. She combines her interests in art, education, information and new media in developing museum multimedia products, such as onsite kiosks and multimedia tours as well as online education strategies. In 2007/08 she worked at MoMA’s Digital Media department, where she was responsible for MoMA WiFi, and worked on various applications for the education and curatorial departments. Recently she managed the redesign of Smarthistory.org – a multimedia arthistory webbook –, and presented an iPhone tour past the stories hidden at MoMA as a participant in the stifo@sandberg masterclass.

Nancy Proctor published her first online exhibition in 1995, intending to revolutionise the contemporary art market. Undeterred by 14k modems, she and Titus Bicknell then co-founded TheGalleryChannel.com in 1998, with the aim of publishing virtual tours of obscure exhibitions alongside comprehensive global museum and gallery listings. Both Nancy and TheGalleryChannel were acquired by Antenna Audio, where she searched for the answer to mobile interpretation as head of New Product Development for nearly 8 years. She now works cross-platform again as Head of New Media at the Smithsonian American Art Museum, Washington, where she hopes to figure out what the question is.

Last year laptop sales outstripped those of desktop PCs for the first time. This shift is thought not just to have happened because of the laptop’s greater mobility and more attractive appearance, but also because of the recent growth in the adoption of wireless broadband Internet. The trend towards smaller computers can also be found in the increasing popularity of smartphones. Smartphones have been around for a couple of years, but since the launch of the iPhone in June and the iPod-Touch in September 2007, their popularity has soared, and many other accessible WiFi-friendly devices have come on the market. Soon the sales of portable mobile web devices might surpass that of laptops. With more visitors utilising them, museums will have an interesting new technology to work with.

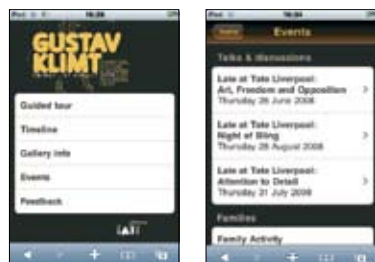
In 2007-2008 I spent a year working at the Museum of Modern Art in New York, (MoMA), where I developed MoMA WiFi. Back in the Netherlands I led a smartphone workshop with Virtueel Platform for the DEN conference 2008 (entitled ‘Naar buiten’) together with Nancy Proctor, Head of New Media at the Smithsonian American Art Museum in Washington DC, and former manager of product development at Antenna Audio, and Titus Bicknell, former

head of Mobile Technologies at Antenna Audio. This article contains two parts: the first is a short introduction to the ways and places museums can reach mobile web users. The second offers an insight in to the practical aspects of developing a smartphone project, in the form of an interview between myself and Nancy Proctor about the lessons I learned developing MoMA WiFi and Nancy's experience in developing handheld tours.

During this article the word smartphone will be used to refer to WiFi enabled handheld devices with browser functionalities. Smartphones in this case do not need to be phones. The term iPhone is used to refer to both the Apple iPhone and iPodTouch.

The surge of the mobile web offers many ways in which museums can reach their visitors:

The first museum projects to use the mobile web have all been interpretive applications: audio- or multimedia tours for museum visitors. The San Jose Museum of Art handed out iPodTouches in the galleries, with a web-based video tour of their special exhibitions. The Museum of Modern Art launched MoMA Audio on MoMA WiFi, with three ways to browse all of its audio tours, and Tate Liverpool created an iPhone video guide for their Gustav Klimt exhibition, and information about the museum, a timeline of the life of Gustav Klimt, and a calendar of related events.



iPhone video guide for *Gustav Klimt* exhibition, Tate Liverpool, UK

Another possible way in which museums can use the mobile web is with location-specific content. No web-based tours have been created yet, but a good inspiration is the Mobile Bristol project, in which PDAs like the iPaq Pocket PC were used to create a digital layer over the physical city:

‘The Mobile Bristol Centre was a programme investigating how mobile devices and pervasive information technology can be used to enhance the ways in which residents and visitors experience and interact with their physical environment and with each other in urban and public spaces.

Imagine a digital landscape overlaying the physical world. As we walk around this landscape, we can tap into the



digital sounds, sights and interactions that are positioned in the landscape and activated by our presence and actions.

The digital landscape is formed from a dynamic and overlapping set of mediascapes which are context-sensitive combinations of digital media and interactions created and deployed by various authors.’
(<http://www.mobilebristol.com/>)

The University of Nottingham has created a series of apps specifically for students in the lab. The Biocourseware project (www.biocourseware.com) contains of a series of small applications including reference materials, such as a Periodic Table, Bio and Chemistry Dictionary, or History of Genetics, but also tools like a Cal Concentration app, to quickly calculate concentrations during chemistry experiments.

Apart from interpretive devices, in the galleries or on location, museums can also target the people that access the museum website with their smartphone. The numbers are not very large yet: In a presentation at the Tate Handheld conference, the Getty Museum indicated that at the moment only 0.36% of their website visitors use smartphones, but those smartphone users might also be turned away by smartphone unfriendly websites. One can target smartphone users by keeping in mind that mobile web users have much smaller screens and are on the road, thus they tend to read less and look for more direct information (visit information and calendars and addresses) than home Internet users. Tate Liverpool addressed this challenge with a useful calendar, and another good example of smartphone targeted design is the New York Times iPhone App.

Even a summary look at the most popular Apple Web Apps (<http://www.apple.com/webapps/>) show that online visitors can be informed or entertained beyond the basic museum website. The WebApp top 20 counts twelve popular games, but also ‘This Day in History’ – an app that displays significant historical events that took place on the current day. Museums could make games tied to their collections, such as Launchball, an entertaining physics game from the Science Museum in London. Or they can share their collection through an application such as the popular Rijksmuseum widget, which shows a new object from their collection each day, a concept that can be easily translated to the mobile web.

Images iPhone: (Top) iPhone application including periodic table, Biocourseware project, University of Nottingham, UK

(Centre) MoMA audio iPhone application, Museum of Modern Art, New York

(Bottom) New York Times iPhone application, <http://mobile.nytimes.com>

with their laptop. The timing was in our favour: in 2008 it made sense for a public institution to offer WiFi. Once the WiFi was open, the garden was not flooded with museum visitors surfing the web, but we did limit both the download and the upload rate on the WiFi to discourage misuse.

NP

How did you deal with the rights issue?

LM

MoMA has an agreement with Acoustiguide that they have the rights to use the audio tours on multiple platforms, which also allows the podcast downloads for instance. So the rights were not an issue for us. I know other museums talked at the Tate Handheld conference about not having the rights, and how that is a big issue for them.

NP

At one point about fifteen percent of Tate's multimedia tour budget was spent on buying the rights to the images. It's harder in a museum of modern and contemporary art obviously, but even if you're dealing with historical art, there are rights on the script, there are rights from the voices, the narrators, music, etc.

LM

A good solution for museums is to create or manage the creation of the multimedia tour content themselves. You still have to buy the rights to the images, but it saves you the copyright on the scripts, you can set up your own agreements with the voices and it gives you more space to try things out, too.

NP

What are your thoughts on WiFi projects in Europe?

LM

What I noticed when I visited Washington DC is that there's WiFi in all of the Smithsonian museums. I think we are a couple of years behind in Europe when it comes to both WiFi coverage and also the pick-up rate of smartphones, in part because technology is launched later and is more expensive in Europe. One of the problems for European museums is that they are housed in historical buildings, with thicker walls, which makes it more difficult to get a seamless WiFi coverage. But that might be resolved soon, since the wireless web is becoming increasingly important. We might

not want a web-only tour everywhere right now, but it is worth thinking about this new platform. If you're looking at reaching visitors on their own devices, developing for mobile web platforms has many advantages. First of all the web is a cheap platform to develop for, webcoding is easier and cheaper than working in C. And a website is device-independent as opposed to iPhone apps or most multimedia tour software. Another advantage is that you can build one site, and have one base of content and then tweak the look or the type of content that you show for different devices, by using smart scripts and CSS files. Titus Bicknell actually explained in our workshop at the DEN conference how it's hard to deal with the rate of new devices, he described how the content that was created for the iPaq 3600 was technically unusable by the iPaq 3950, so assets had to be changed and software had to be rewritten, either because of screen sizes, or different functionalities on the new device. You can bypass a lot of these problems by working with a more open platform.

If you are very keen on making an app, though, instead of something web-based, there is a wonderful tool called PhoneGap that is (as their own website describes it) 'a development tool that allows web developers to take advantage of the core features in the iPhone, Android, and Blackberry SDK'.

NP

With the MoMA WiFi project were you concerned about producing a product that really only people with iPhones could access?

LM

I can answer that in two ways. The first is that we were not disadvantaging any visitors without iPhones because the museum already hands out their audio tours for free on location. And secondly, whilst MoMA WiFi looks like it's made for the iPhone, it is actually accessible with multiple devices. We chose not to use the Apple script that makes you slide from menu to menu because that doesn't work on other 'phones'. But at the time of launch the iPhone and iPodTouch were the only ones that made browsing really easy, and allowed you to listen to MP3s. The Blackberry doesn't allow you to listen to embedded MP3s, which means they can't use MoMA WiFi. Currently there



Tate Handheld tours

are already more devices out there that have the functionalities that Apple put in their browsers. A third answer to that question would be that we weren't concerned with the low number of visitors that would be able to use it because we felt we were trying things for the future, and the costs for the development were minimal. It is really just a website that was built in house.

NP

One of the very first lessons I learned when we were trying to do the first multimedia tours with Antenna is how unstable and unreliable it can be to have content delivered wirelessly to a device in the museum. You talked about thick walls in a historic building but even at MoMA when I was trying MoMA WiFi I fell off the network at one point. What is your response to that and do you have any strategies in developing a web based mobile programme that mitigates against the inherent instability of wireless delivery and sures it up to guarantee a more stable users experience?

LM

The only solution that I have, and something we did with MoMA WiFi is to make it as easy as possible for people to reconnect, and to use language and designs that show you when you are disconnected, and tell you how to get back on. If you don't want the dangers of WiFi instability, you'd have to make something downloadable, like an App, but then we get all the issues of platform specificity and filling up users devices again.

NP

But how about other issues, let's say I've got a perfectly good connection to the network: What should designers of mobile solutions that are using web based systems expect the users to encounter in terms of latency or other kinds of usability issues in browsing through web-based audio and video content which is bit heavier?

LM

File size is an issue. During development we found that the pages with many MP3s were loading very slowly, so we lowered the bitrate of the MP3s, which made a big difference. Now we have a system where the podcasts are in a high bitrate, and the WiFi ones are low. Having a good asset management system saves a lot of time there. Another thing to bear in mind with a WiFi application is that it is

invisible in the museum, without a desk or physical devices. It is easy to miss. We noticed that we had to make more effort promoting the service, on the screens in the lobby, and with flyers, to inform visitors that they could use it.

NP

Perhaps this is something that museums need to think about in terms of the future hosting of web based mobile solutions: that the more people who come to the museum with WiFi enabled devices and the more people who try to use it, frankly the more bandwidth the museum is going to have to put at the disposal of the mobile tour. It also underscores the fact that mobile web today can be compared to the fixed web 10 years ago in terms of what you can do. If designers of mobile web tours and information systems think of it in those terms that might help them design within the inherent limitations of the technology. And hopefully also help the marketing people to set expectations at the right level. One of the challenges that we faced with early multimedia tours was that people had never taken one before. They expected these devices to do everything, way beyond the capabilities of the technology. We soon learned to try to the lower expectations dramatically so that people weren't disappointed.

LM

One of the advantages of developing for people's own devices is that they know how to deal with and troubleshoot them themselves. They probably know how to reconnect to a wireless signal for instance.

NP

When we first started hearing museums talk about people using their own device they thought they would save money on hardware and staff. I warned museums against thinking that this was the case because maybe instead of distribution staff you're going to have to provide IT professionals to help people troubleshoot their own PDA. I'm interested to hear from you that that hasn't actually become an issue – as you say people are used to troubleshooting their own devices.

LM

At the moment most smartphone owners are tech savvy. Perhaps as more 'regular' people use them that might become an issue again. But these tech savvy users have higher expectations.

We were also dealing with the expectation of everything being live and up-to-date. One complaint we had was that the tour showed a painting that was no longer on view. Although the technology makes it easy to be up to date our WiFi database was not yet linked to the collection management system.

NP

That is going to be a massive challenge for almost every museum: having a centralised content management solution for all of these platforms.

As far as content is concerned, Kelvin Smith from the Metropolitan Museum of Art is currently researching this and his basic argument is that in many ways we put out this advanced technology but we quickly simplify it. Our first multimedia tour at Tate in 2002 was location based, had wireless streaming of content and book marking and we added text messaging. All that has been stripped out now. The multimedia tour has become something much closer to the traditional museum audio tour, but with images and some level of interaction. It does not really push the boundaries of what that networked devices should be capable of. And he's asking: maybe we have gone too far in the direction of simplifying. That actually the great potential with these devices is to reach out to audiences who would take a traditional audio tour. We need to be thinking about how people are using these devices in their everyday lives and respond to those expectations and habits and the social networks and activities that come with them. Perhaps we should pump up the complexity instead of starting to simplify.

LM

Visitors could bookmark to their own del.icio.us, and you could 'share' content to your own facebook or twitter etc. When it comes to increasing complexity and adding features, one of the great advantages I see in developing for the mobile web is that we can quickly put something together, test it with visitors, change and adapt it - and move towards more of an agile development model, which unfortunately seems to be an underused development model at museums. We can, for instance, try eliciting more visitor feedback or input, in either text, video or photos taken by visitors. There are so many things to try.



Dan Porter, 2008
(<http://www.giantthumb.com>)

In September 2008 Tate Modern organised a conference where a group of international experts from museums came together to share ideas, thoughts and practical advice on the use of handheld interpretation in their galleries and beyond. The issues were laid out into mindmaps by Dan Porter. After the conference, the organisers and attendees filled a very useful wiki (<http://tate.handheldconference.pbwiki.com>) with speakers' presentations, the mindmaps and discussions. An article about the conference can be found on the Virtueel Platform website: <http://www.virtueelplatform.nl/page/12134/nl>.

MULTI-PLATFORM

- MULTICAST
- MULTI PLATFORM
- MULTIMEDIA
- EVERYTHING IN A WEB-BASED APPLICATION! INCLUDING A VOICE RECORDER!

HOW IMPORTANT IS IPOD TOUCH

GOING FORWARD?

- AVOID CONTENT AND FEATURE THAT ARE PLATFORM SPECIFIC
- IPHONE COMPATIBLE BUT X-PLATFORM
- IT CAN BE EASY TO USE SAME CONTENT ACROSS DIFFERENT PLATFORMS (MOBILE AND KIOSKS)

MAKING CONTENT AVAILABLE THROUGH DIFFERENT CHANNELS

ITUNES

YOUTUBE

- WHERE TO DISTRIBUTE YOUR CONTENT
- FREE DISTRIBUTION OF DEVICES
- IMAGE RIGHTS PROBLEM?

IN-HOUSE PRODUCTION

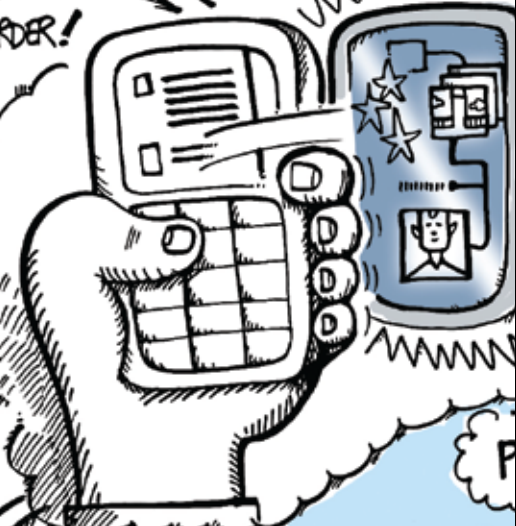


- REUSABLE PLATFORM
- VALUE FOR MONEY

AS THE MUSEUM CHANGES - WHAT IS A TOUR?

- WHAT IS GIVING ADDED VALUE?

NEXT GENERATION HANDHELDS



PERSONALISATION

LOCATION AWARENESS

AUDIENCE EXPECTATION

PRE-VISIT LINK TO WEB....

WHAT'S THE BENCHMARK FOR SUCCESS WITH THESE ADVANCED FEATURES?

CONNECT ARTWORK TO ARTWORK

BOOKMARK!

AUTOMATIC TOUR GENERATION

POST-VISIT

BOOKMARK!

USER GENERATED CONTENT



WILL USERS GENERATE THEIR OWN TOURS?

HI, I'M DAVE - I LOVE MATISSE!

HOW USEFUL IS USER-GENERATED CONTENT TO OTHER USERS?

HOW DOES USER GENERATED CONTENT CHANGE THE BUSINESS MODEL?

HOW DO WE FILTER USER GENERATED CONTENT?

HOW DO USERS RETRIEVE IT?

GOOD UGC

USERS CAN CONTRIBUTE IN AREAS THEY ARE EXPERTS IN



Dan Porter, 2008
 (<http://www.giantthumb.com>)

Dutch Summaries/ Nederlandse Samenvattingen

[Urban Screens, Mirjam Struppek, p23-28]



Urban screens zijn displays en interfaces in de openbare stedelijke ruimte zoals plasma-schermen en lichtkranten, waarop bewegend beeld (video), tekst en geluid geprojecteerd worden. Doorgaans zijn op deze schermen commerciële reclameboodschappen te zien. Mirjam Struppek onderzoekt in haar project URBAN SCREENS hoe deze schermen kunnen worden ingezet voor kunst en cultuur.

Struppek gelooft dat publieke schermen goed gebruikt kunnen worden voor de uitwisseling van kunst en cultuur. Ook kunnen de schermen een maatschappelijke rol spelen voor wat betreft de betrokkenheid van bezoekers en bewoners bij de stad en als communicatiemedium tussen mensen. Nu digitale media een vanzelfsprekend onderdeel zijn geworden van de maatschappij, is het tijd kritisch te kijken naar de duurzaamheid van deze nieuwe media. In hoeverre kunnen ze echt bijdragen aan de verbetering van de sfeer en het leefklimaat van de stad? Hoe kunnen kunstenaars en instellingen urban screens inzetten voor een groter publieksbereik?

Veel hangt af van de juiste balans tussen content, omgeving en techniek. Struppek pleit voor een dialoog tussen alle belanghebbenden waarin ruimte is voor nieuwe ideeën en creatieve zienswijzen. Kunstenaars en culturele instellingen kunnen in dit stadium veel goeds bijdragen aan de vormgeving van onze *screen based world*.

[It's All About the Position, Baby, Teresa Dillon, p25-36]



Teresa Dillon is mede-oprichter van *Polar Produce*, een multidisciplinaire groep kunstenaars en ontwerpers uit Bristol (UK), die in *live performances* mediakunst en onderzoek bijeen brengt. Dillon's interesse gaat uit naar het blootleggen van gedragsystemen en de relatie tussen mensen en hun omgeving. Locative media probeert de

grenzen tussen kunst en commercie te vervagen. Dillon gebruikt locative media art in haar eigen werk om aan een nieuw menselijk landschap te bouwen en een nieuw gevoel van plaats te creëren.

Dillon is niet alleen kunstenaar maar studeerde ook psychologie. Bij de ontwikkeling van nieuwe media-toepassingen voor een groot publiek, bijvoorbeeld TomTom of Google Maps, ligt de focus vaak op de techniek, maar wordt er weinig aandacht besteed aan het sociale en filosofische aspect, aldus Dillon. Projecten die de menselijke factor wél meewegen, worden over het algemeen door individuele kunstenaars of medialabs geïnitieerd. Veelal zijn dit experimenten met een specifieke technologie op een specifieke locatie – bijvoorbeeld voor eenmalige festivals en conferenties. Bijgevolg blijft het bereik en de zichtbaarheid klein.

In haar artikel legt Dillon verbanden tussen enkele wetenschappelijke theorieën en haar eigen werk: Hoe kunnen deze 'parallele werelden' naast elkaar bestaan? Hoe draagt locative media art bij aan de ontwikkeling van een nieuw begrip van plaats en ruimte?

[Aiming for Dead Reckoning, Yolande Harris, p41-52]



Yolande Harris woont en werkt sinds enkele jaren in Nederland en richt zich met haar projecten op de relatie tussen technologische ontwikkelingen en *environmental engagement*. Wat is het effect van navigatie technologie als GPS op onze beleving van ruimte, omgeving en locatie? De toenemende precisie van satelliet navigatie probeert iedere menselijke fout te voorkomen, tegelijkertijd veroorzaakt het een gevoel van desoriëntatie van de directe omgeving door de locatie te abstraheren in coördinaten van geografische lengte en breedte graden. Welke rol speelt het lichaam, de zintuigen, het bewuste en onbewuste en de omgeving nog als deze informatie door de toepassing van abstracte GPS data overtuigend wordt? Wat gebeurt er met ons en onze omgeving als wij alleen nog maar vertrouwen op abstracte data uit GPS, TomTom etc.? In haar project *Sun Run Sun* verbindt Harris live GPS signalen van satellieten uit de ruimte

met coördinaten van bezoekers die door de stad of in de natuur lopen. De speciaal ontworpen draagbare instrumenten, de *Satellite Sounders*, bestaan uit een GPS ontvanger en geluidsprocessor die ervoor zorgen dat bezoekers de omgeving op een nieuwe manier in zich opnemen. Met *Sun Run Sun* krijgt de stad een nieuw gezicht voor de wandelaar en wordt hij/zij bewust van het effect van technologie op onze beleving van ruimte, omgeving en locatie. De compositie verandert continue afhankelijk van de positie en locatie van de bezoeker en diens positie ten opzichte van de satellieten. De wandeling maakt hoorbaar wat het betekend om verdwaald te zijn en om plaats bepalend door de stad te lopen.

[Traversing the Route: From MediaMarkt to Cameroon, Esther Polak, p53-64]



Esther Polak ontleent haar bekendheid aan 'locative media' projecten. *AmsterdamREALTIME* stuurde een aantal Amsterdammers een week lang op pad met een GPS apparaat. Hun bewegingen door de stad werden in real time zichtbaar gemaakt op een groot scherm, waarop zich langzaam de kaart van Amsterdam aftekende.

Het project *MILK* volgt de route van een Europees zuivelproduct, van de uier van de koe tot aan de mond van de consument. Alle betrokkenen in deze keten, van de (Letse) boer tot de (Nederlandse) kaasconsument kregen een dag lang een GPS apparaat mee en gaven na afloop persoonlijk commentaar op hun route. Deze commentaren vormen de basis van het project, dat resulteerde in een website en een installatie.

NomadicMILK doet onderzoek naar de mobiliteit van zuivel in West Afrika. Voor dit project werd nieuw visualisatie gereedschap ontwikkeld: een robot die de GPS data omzet en in zandsporen uitrijdt. Esther Polak zoekt in haar werk steeds naar nieuwe manieren om het landschap te onderzoeken en kan daarmee in de lange Europese traditie van landschapsverbeelding worden geplaatst.

'Melk fascineert me omdat de economie van melkproductie het landschap als het ware definieert. Als je uit het raam van de trein kijkt zie je de sporen van wat je eet en drinkt. Als je dat beseft

krijg je opeens een andere gewaarwording van hetzelfde landschap.

Ik ben benieuwd naar hoe mensen praten over de route die ze afleggen en de terminologie die ze daarvoor gebruiken. De mensen in Kameroen, bijvoorbeeld, tekenen geen kaarten, maar gebruiken bepaalde woorden om de weg te beschrijven.

Ik ben steeds op zoek naar nieuwe manieren om de gewaarwording te delen met het publiek, liefst zonder dat ik zelf aanwezig hoeft te zijn. Daarom werk ik met nieuwe media technologieën. Vanaf het begin was ik gegrepen door GPS: het heeft een soort een technische waarheid die mogelijkheden biedt die je zelf nog niet had gezien.'

[In Search of the Unexpected, Martine Neddham, p65-73]



Kunstenaar Martine Neddham werkte na haar studies literatuur en architectuur als decorontwerper. Taal was ook toen al de grondstof voor haar werk: zo maakte ze een tekst op de grond die pas iets ging voorstellen als je erover heen liep. Wat haar het meest fascineerde was de reactie en het gedrag van het publiek. Internet was voor haar een droom die uitkwam, een soort Utopia: het medium bood de kans voor echte interactie tussen maker en toeschouwer. Vanaf 1996 maakt Neddham virtuele karakters. Mouchette is inmiddels een *cult figure* die haar duistere fantasieën met online vrienden uit de hele wereld uitwisselt. David Still (2001) leent zijn identiteit aan alle internetgebruikers en stelt ook zijn mail-account vrijelijk beschikbaar. Ook Virtual Person, Neddams nieuwste project, is een reactie op online communicatiesystemen, met alle onvolmaaktheden en onmogelijkheden vandien. Neddham vindt dat het Internet op dit moment overheerst wordt door design en commerciële belangen.

'Grote bedrijven steken enorm veel geld in de ontwikkeling van bestaande tools. Maar innovatie is niet het uitbouwen van iets dat al bestaat. Het gaat om vragen stellen, hoe je bijvoorbeeld iets juist *niet* gebruikt. Er zijn weinig mensen die zich afvragen wat er gebeurt met alle content die bijvoorbeeld op Facebook staat.

Instellingen zouden op een gegeven

moment wat beter hun best kunnen doen om deze kunst aan een breder publiek te tonen, bijvoorbeeld door het in een andere context te plaatsen. Net_art verdwijnt gewoon. Het komt zelfs voor dat sites die ik twee jaar geleden een *bookmark* gaf, van het web zijn gehaald omdat er niemand meer voor de registratie van het domein betaalde. Ook voor een kunstenaar is het is niet altijd haalbaar om de snelheid van de technische ontwikkelingen bij te houden. Opeens werkt een bepaald script niet meer, of wordt een platform niet meer door de nieuwste browser versies ondersteunt.

Het Internet is niet virtueel, het is creativiteit en fantasie die omgezet zijn in bits op een server. Dat vertaalt zich in een enorme hoeveelheid harde schijven in grote opslagruimtes. Misschien dat we de waarde van Internet meer op prijs gaan stellen wanneer we begrijpen hoe materieel het web eigenlijk is.'

[Museum 2.0, Nina Simon, Shelley Bernstein, p82-90]



Musea maken nog maar weinig gebruik van de mogelijkheden die online media bieden om bezoekers te betrekken bij hun activiteiten. Websites van musea geven weliswaar veel achtergrondinformatie over de kunstwerken, maar via het Internet kan een museum mensen ook een belevenis bieden: bijvoorbeeld door een sociaal netwerk om een tentoonstelling heen te bouwen waar mensen hun eigen verhaal kunnen toevoegen. Of door een omgeving te maken waarin het museum gaat leven, zoals in Second Life, of in een game.

Kunstmusea hebben meer moeite met de integratie van nieuwe media dan techniek- of wetenschapsmusea, die van oorsprong gericht zijn op educatie en interactie met het publiek. Bij de kunstmusea staat het kunstwerk centraal; het is voor hen een uitdaging om digitale media in te zetten op een manier die de werken recht doet. Shelley Bernstein (Chief of Technology van het Brooklyn Museum) en Nina Simon ('independent museum experience designer' en initiator van blog Museum 2.0) zetten nieuwe sociale technologie in om musea dynamischer te maken. Beiden zijn het erover eens dat het voor het slagen van nieuwe

media-projecten belangrijk is dat het museum echt een relatie aan wil gaan met de bezoekers.

Bernstein en Simon zijn zelf constant in dialoog met hun publiek, bijvoorbeeld via blogs en Flickr.

[Getting People Together, Mike Ellis, p91-99]



Volgens Mike Ellis spreekt Web 2.0 fundamentele menselijke behoeften aan. Behoeftes aan liefde en sociaal contact, behoefte aan erkenning, zelfontplooiing – het zijn allemaal elementen van de piramide van Maslow. Het web biedt ons intimiteit, creativiteit en een community. Het web verbindt ons met andere mensen.

Ellis bespreekt in zijn essay hoe het web kan worden gebruikt om mensen samen te brengen (samen zoals in 'in dezelfde kamer') en om vervolgens met die mensen contact te houden. Ter illustratie beschrijft hij twee echte (niet-virtuele) events uit 2008. Hij organiseerde de events met behulp van een combinatie van webtools, waaronder Google Docs, Basecamp, Google Groups, Dropbox, Eventbrite, Campaign Monitor, pbwiki en Flickr.

De deelnemers aan deze events zijn in het dagelijks leven meer dan gemiddeld bekend met technische toepassingen dan anderen. Maar op termijn zal dit voor iedereen hetzelfde zijn.

Ellis wijst erop dat mensen die dicht op de techniek zitten – bijvoorbeeld webdesigners en projectmanagers – vaak niet begrijpen dat de simpelste tools het beste werken. Ze zijn verslaafd aan knoppen en complexiteit, en vergeten dat technologie en processen beter functioneren wanneer ze in zekere zin onzichtbaar zijn.

Essentieel bij het gebruik van het web voor events is om eerst te onderzoeken welke van de verschillende tools geschikt zijn voor de bepaalde doelgroep en het onderwerp – en om te kiezen welke technologieën je het best in de context van het event kan gebruiken.

In de toekomst zullen online en offline ervaringen steeds meer samengaan, en zullen evenementen zich uitbreiden met een pre-event en een post-event op het web.

Het web verbindt mensen nu nog

voornamelijk in een virtuele ruimte, maar deze focus zal verschuiven naar het samenbrengen van mensen in de fysieke ruimte. Uiteindelijk vervagen zo de tegenstellingen tussen 'het fysieke' en 'het virtuele'.

[Making Content Social, Sebastian Chan, p100-108]



Het Powerhouse Museum in Sydney Australië doet baanbrekend onderzoek naar het gebruik van sociale technologie in het museum. Het museum ontwikkelt innovatieve online projecten en betreft zo wereldwijd bezoekers en gebruikers.

Na twee jaren van experimenteren plaatste het museum in 2006 70% van de collectie online. Vanuit de veronderstelling dat het museum een verzameling van ervaringen is, biedt de website de mogelijkheid om stukken van de collectie te zoeken en te *taggen*. Ook kunnen bezoekers eigen kennis en ervaringen toevoegen aan die van het museum.

Het accent ligt op eenvoud en *serendipity*: het is makkelijk om te vinden wat men zoekt, maar de website stimuleert de gebruiker ook om te verdwalen en nieuwe dingen te ontdekken. Binnen 6 maanden na de lancering van de site was de *traffic* verdrievoudigd. Deze toename van publiek was vooral te danken aan de toename van buitenlandse gebruikers. Het team had verwacht dat de interesse vooral uit zou gaan naar bekende werken, maar in de eerste paar maanden nadat de verzameling online ging werd 95% van alle beschikbare objecten in de database bekeken. Zo werd het mogelijk om individuele bezoekers op smaak te bedienen, iets wat zonder een online collectie volledig ondenkbaar zou zijn.

Je kunt veel leren van de gegevens die bezoekers op de website achterlaten, zegt Sebastian Chan, hoofd *Digital Services & Research* van het Powerhouse Museum.

[Museums and the Mobile Web, Lotte Meijer, p109-120]



De verkoopcijfers van laptops overstegen vorig jaar (2008) voor het eerst die van desktop PC's. Deze verschuiving wordt niet enkel ingegeven door de mobiliteit en het aantrekkelijke uiterlijk van de laptop maar komt ook door de toenemende beschikbaarheid van draadloos breedband Internet. De trend zet zich door in de populariteit van smartphones. En nu steeds meer bezoekers gebruik maken van deze PDA's (Personal Digital Assistant), hebben musea een interessante nieuwe technologie om mee te werken. Het mobiele web biedt vele manieren waarop musea hun bezoekers kunnen bedienen en informeren.

De eerste museum projecten die waarbij gebruik werd gemaakt van het mobiele web zijn verklarende toepassingen zoals audio- of multimedia tours, die de tentoonstelling in het museum toelichten.

Een andere manier waarop musea het mobiele web kunnen integreren zijn locatie gebaseerde toepassingen. Web-based tours bestaan nog niet, maar een goede inspiratiebron is het Mobile Bristol Project, waarin PDA's werden gebruikt voor het maken van een digitale omgeving, die als een tweede laag over de fysieke stad ligt.

Musea die zich richten op smartphone gebruikers moeten rekening houden met het feit dat PDA's veel kleinere schermen hebben en dat de gebruikers onderweg zijn. Ze kunnen minder (lang) lezen en zoeken eerder naar concrete informatie dan Internet gebruikers thuis.

In de Apple WebApplications Top 20 telt staan maar liefst 12 games. Het Science Museum in Londen heeft een spel, Lauchball, waarin de collectie getoond wordt. Ook de populaire widget van het Rijksmuseum, dat elke dag een ander object uit de collectie toont, zou prima kunnen worden omgezet naar het mobiele web. Lotte Meijer was in 2007 en 2008 werkzaam bij het Museum of Modern Art in New York (MoMA), en ontwikkelde daar MoMA WiFi. Het vraaggesprek tussen Meijer en Nancy Proctor biedt inzicht in de praktische aspecten van de ontwikkeling van een smart-phone project.

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Beyond Physical Space: examples of documentation

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