

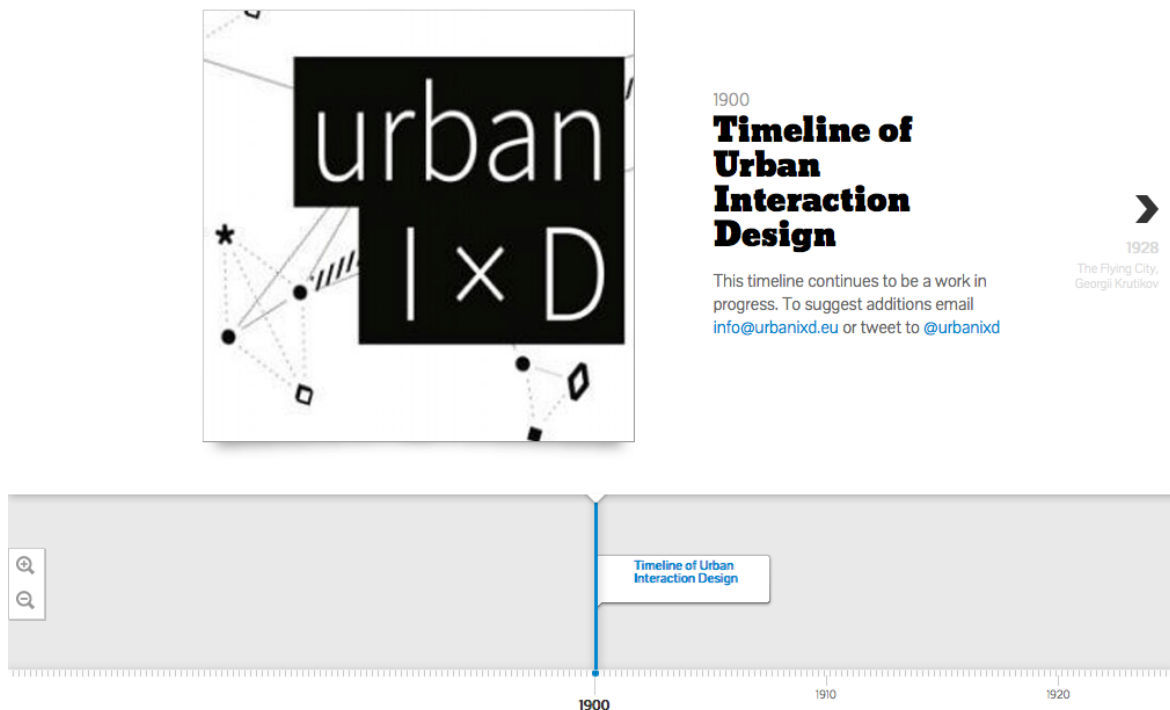
# UrbanIxD Timeline

## Mapping the development of Urban Interaction Design

This timeline maps the development of Urban Interaction Design, its influences and related fields. It's a work in progress and the project will continue to update the timeline until the end of December 2014. The timeline is available on the project website, and viewers can comment and make suggestions about the content.

The timeline was created with TimelineJS, hosted on GitHub, and is an open-source tool that enables visually-rich interactive timelines.

**[www.urbanixd.eu/timeline](http://www.urbanixd.eu/timeline)**



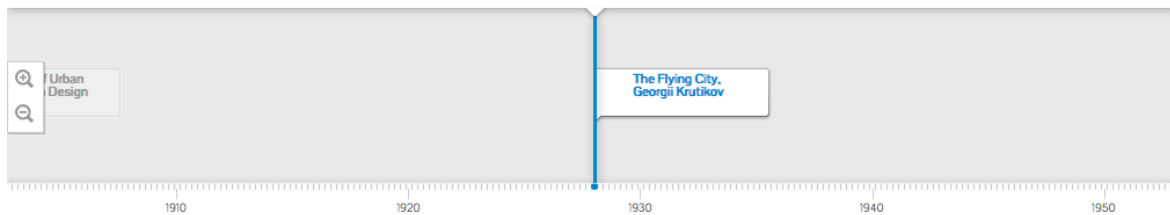
1900  
Timeline of Urban  
Interaction Design



## 1928 The Flying City, Georgii Krutikov

In 1928, the young architect Georgii Krutikov, in defending his diploma work at VKhUTEIN, presented a thesis project completely insane for the time, a 'City of the Future', which immediately became a sensation. The concept of a 'flying city' was as follows: the architect proposed to leave work, leisure, and tourism on the ground, while living areas would be moved to communes floating in the clouds of the city.  
<http://thechamelhause.org/2013/05/20/georgii-krutikov-the-flying-city-vkhutemas-diploma-project-1928/>

1961  
Fun Palace, Cedric  
Price

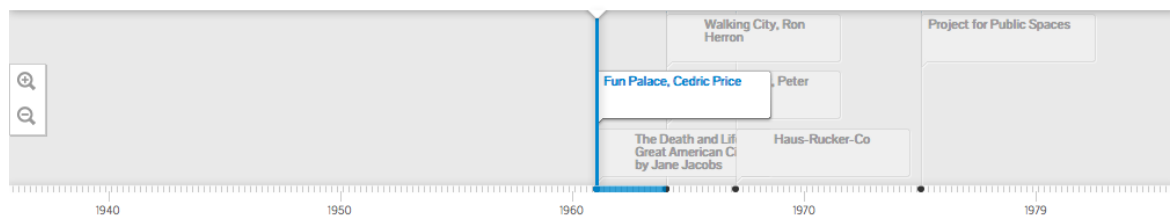


1928  
The Flying City,  
Georgii Krutikov

## 1961 — 1964 Fun Palace, Cedric Price

A combination of architecture and technology, a building that could transform itself. <http://www.cca.qc.ca/en/collection/283-cedric-price-fun-palace>

1961  
The Death and  
Life of Great  
American Cities by  
Jane Jacobs



## THE DEATH AND LIFE OF GREAT AMERICAN CITIES

JANE JACOBS



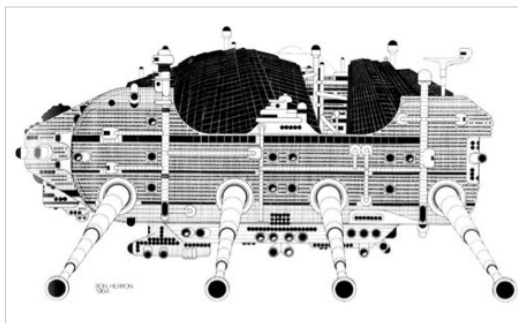
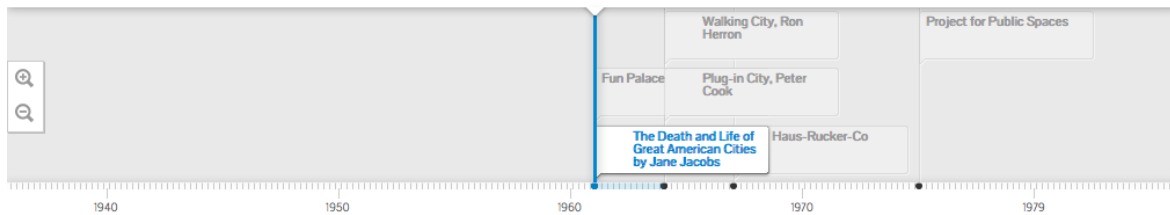
1961  
Fun Palace, Cedric Price

## The Death and Life of Great American Cities by Jane Jacobs

The Death and Life of Great American Cities has, since its first publication in 1961, become the standard against which all endeavors in that field are measured. In prose of outstanding immediacy, Jane Jacobs writes about what makes streets safe or unsafe; about what constitutes a neighborhood, and what function it serves within the larger organism of the city; about why some neighborhoods remain impoverished while others regenerate themselves. She writes about the salutary role of funeral parlors and tenement windows, the dangers of too much development money and too little



1964  
Walking City, Ron Herron



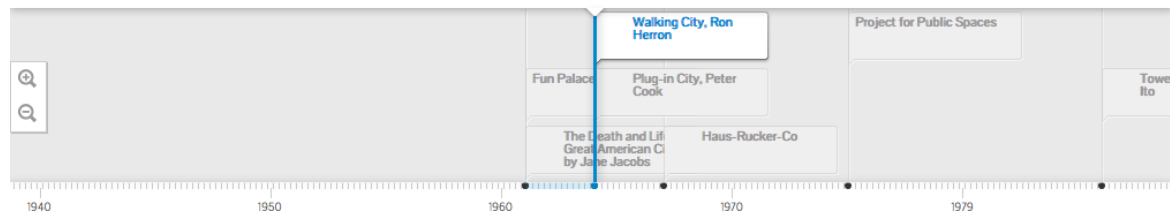
1961  
The Death and Life of Great American Cities by Jane Jacobs

## 1964 Walking City, Ron Herron

Walking City imagines a future in which borders and boundaries are abandoned in favour of a nomadic lifestyle among groups of people worldwide. Herron R. (1964)  
<http://uthprisoners.tumblr.com/post/4531780849/walking-city-archigram>

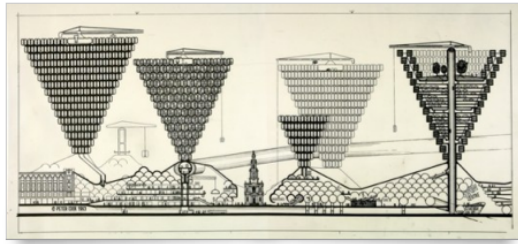


1964  
Plug-in City, Peter Cook





1964  
Walking City, Ron  
Herron



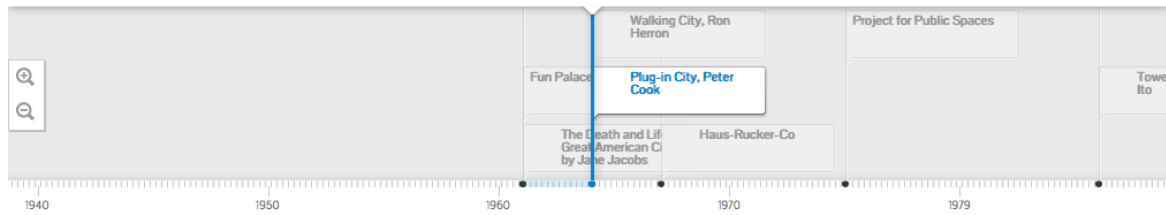
1964

## Plug-in City, Peter Cook

The Plug-in City is set up by applying a large scale network-structure, containing access ways and essential services, to any terrain. The Plug-in City is in fact not a city, but a constantly evolving megastructure that incorporates residences, transportation and other essential services—all movable by giant cranes. <http://www.arch-daily.com/399329/ad-classics-the-plug-in-city-peter-cook-archigram/>



1967  
Haus-Rucker-Co



1964  
Plug-in City, Peter  
Cook



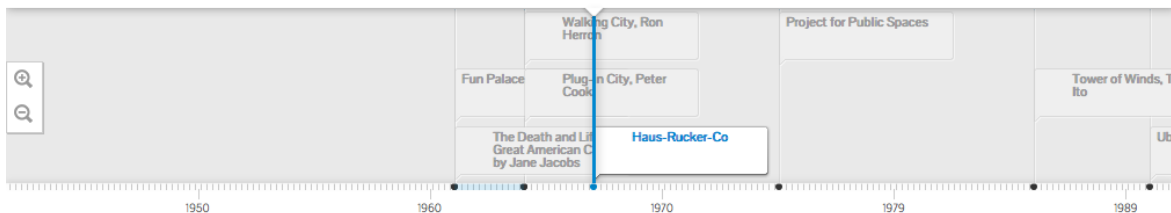
1967

## Haus-Rucker-Co

Haus-Rucker-Co were a Viennese group founded in 1967 by Laurids Ortner, Günther Zamp Kelp and Klaus Pinter, later joined by Manfred Ortner. Their work explored the performative potential of architecture through installations and happenings using pneumatic structures or prosthetic devices that altered perceptions of space. Such concerns fit with the utopian architectural experiments of the 1960s by groups such as Superstudio, Archizoom, Ant Farm and Coop Himmelblau. Alongside these groups, Haus-Rucker-Co were exploring on the one hand, the potential of architecture as a form of critique, and on the other the possibility of creating designs for technically mediated experimental environments and utopian cities. <http://www.spatiala->



1975  
Project for Public  
Spaces





1975

## Project for Public Spaces

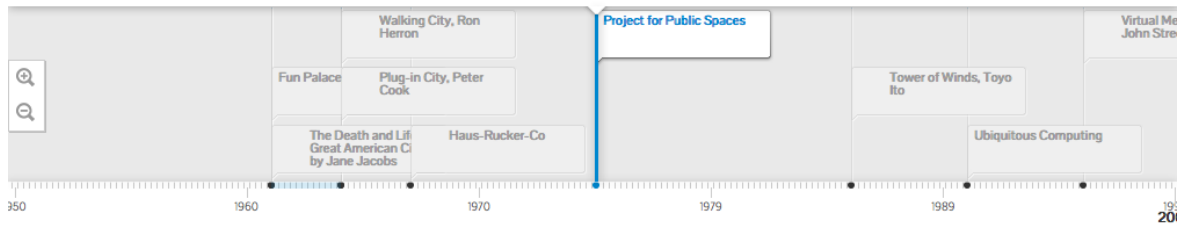


1967  
Haus-Rucker-Co

Project for Public Spaces (PPS) is a nonprofit planning, design and educational organization dedicated to helping people create and sustain public spaces that build stronger communities. PPS was founded in 1975 to expand on the work of William (Holly) Whyte, author of *The Social Life of Small Urban Spaces*. They have since completed projects in more than 3000 communities in 43 countries. <http://www.pps.org/about/>



1986  
Tower of Winds,  
Toyo Ito



1986

## Tower of Winds, Toyo Ito

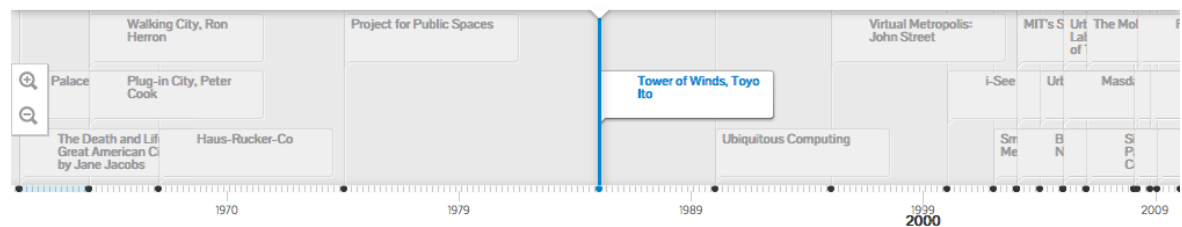
A tower that samples surrounding sounds and light and reflects these in lights in the skin of the tower. The Tower of Winds demonstrates Toyo Ito's approach to architecture, particularly his belief in the importance of technology and its vital role in the future of architecture. The project not only embraces technology and involves it in a dialogue with the city, but also establishes a direct symbolic relationship between nature and the installation. <http://www.archdaily.com/344664/ad-classics-tower-of-winds-toyo-ito/>



1975  
Project for Public  
Spaces



1991  
Ubiquitous  
Computing



1986

Tower of Winds, Toyo Ito

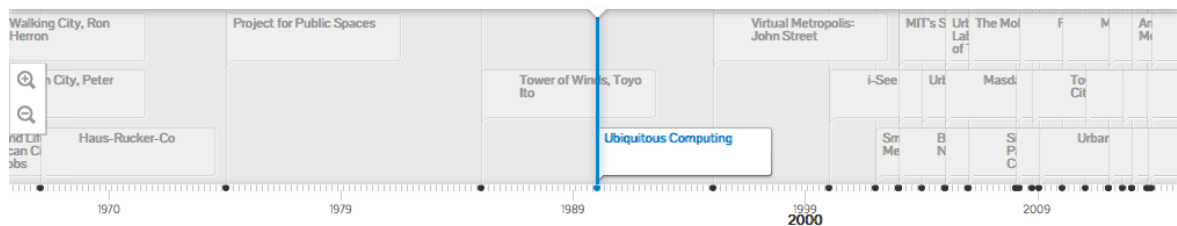
1991

Ubiquitous Computing

Ubiquitous computing (ubicomput) is a concept where computing is made to appear everywhere and anywhere. This new paradigm is also described as pervasive computing, ambient intelligence, or everywhere. The term was coined by Mark Weiser, a chief scientist at Xerox PARC, in his 1991 article "The computer for the 21st century"

1996

Virtual Metropolis: John Street



1991

Ubiquitous Computing

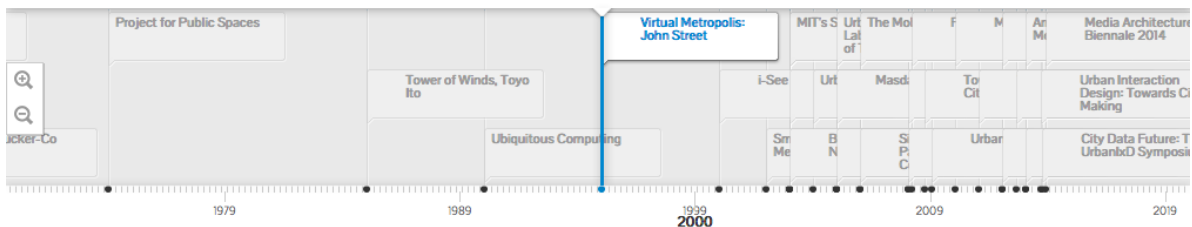
1996

Virtual Metropolis: John Street

Virtual Metropolis: John Street was a project at the University of Toronto. The early iteration of that project, "The John Street Media Corridor," earned a City of Toronto Urban Design Award and influenced Toronto's Entertainment District Master Plan. In 1996 VM used the first practical, pre-commercial version of Apple's QTVR to navigate a district in Toronto in a virtual, non-normative way: "VM makes visible the multi-layered culture of the contemporary, wired city. If as Barthes says, the city is a book with a thousand million poems, then this is the place where its pages unfold. Here architecture and urbanism

2001

I-See





1996  
Virtual Metropolis:  
John Street

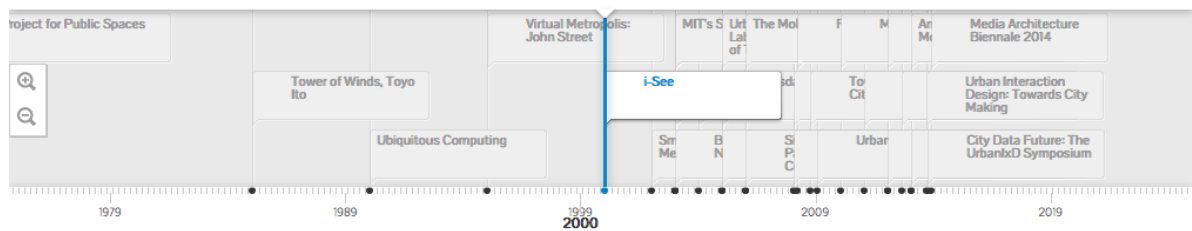


## 2001 i-See

iSee is a web-based application charting the locations of closed-circuit television (CCTV) surveillance cameras in urban environments. With iSee, users can find routes that avoid these cameras ("paths of least surveillance") allowing them to walk around their cities without fear of being "caught on tape" by unregulated security monitors.  
<http://www.appliedautonomy.com/isee.html>



2003  
Smart Cities  
program, MIT  
Media Lab



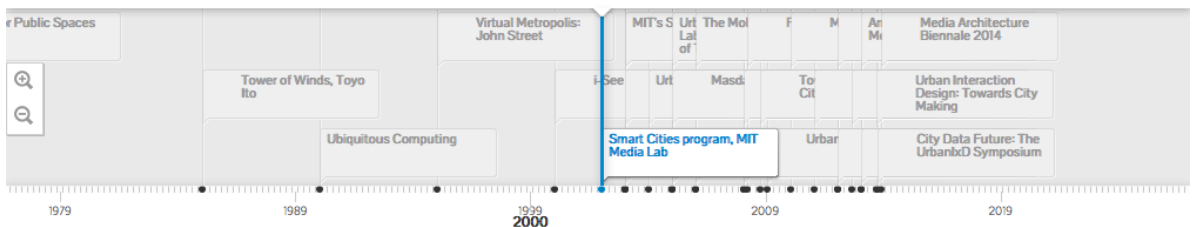
2001  
i-See

## 2003 Smart Cities program, MIT Media Lab

William J. Mitchell created the Smart Cities program within the MIT Media Lab, at Massachusetts Institute of Technology. <http://cities.media.mit.edu/>



2004  
Pac-Manhattan





2004  
Yellow Arrow  
project

phones. <http://pacmanhattan.com/>



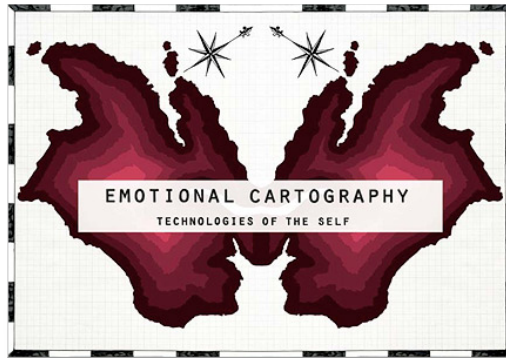
2004  
Bio Mapping:  
Christian Nold

[lowArrowNewark/](#)





2004  
Yellow Arrow  
project



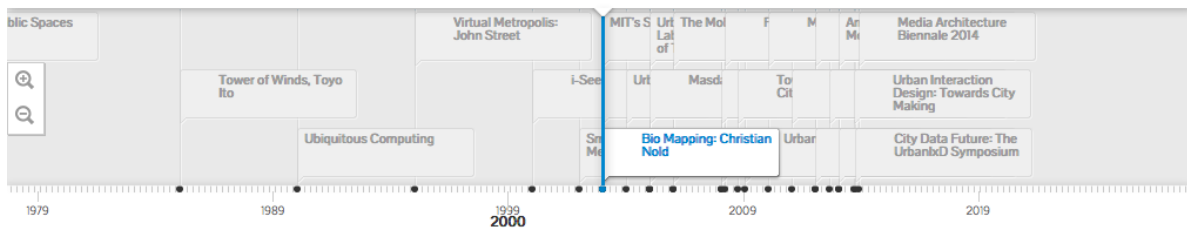
2004

## Bio Mapping: Christian Nold

Bio Mapping is revolutionary methodology and tool for visualising people's reactions to the external world. Over 2000 people have taken part in community mapping projects in over 25 cities across the globe. In structured workshops, participants re-explore their local area with the use of a unique device invented by Christian Nold which records the wearer's Galvanic Skin Response (GSR), which is a simple indicator of emotional arousal in conjunction with their geographical location. On their return, a map is created which visualises points of high and low arousal. The unique methodology of this project involves working with groups of people to interpret and analyse the data and adding annotating onto these



2004  
MIT's SENSEable  
City Lab



2004

## MIT's SENSEable City Lab

Transdisciplinary research group that studies the interface between cities, people and technologies and investigates how the ubiquity of digital devices and the telecommunications networks that augment our cities are impacting urban living. Massachusetts Institute of Technology. Directed by Carlo Ratti.

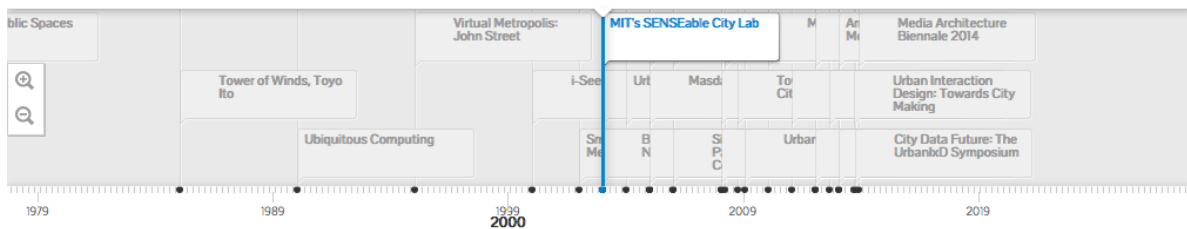
<http://senseable.mit.edu/>



2004  
Bio Mapping:  
Christian Nold



2005  
Urban Screens  
Conference





2004  
MIT's SENSEable  
City Lab

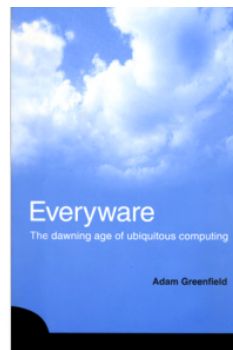
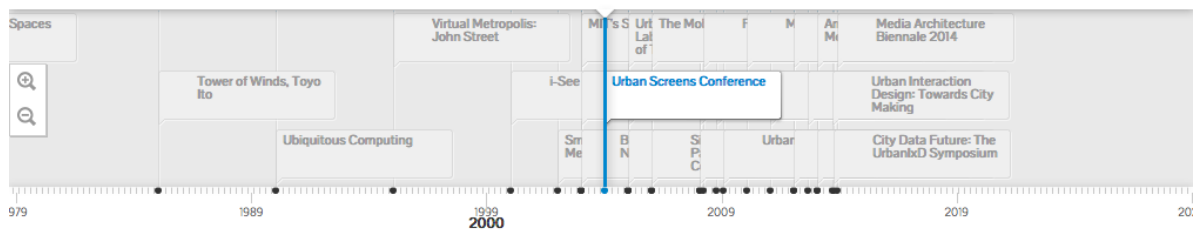
2005

## Urban Screens Conference

The first Urban Screens conference: 'Urban Screens 05: Discovering the Potential of Outdoor Screens for Urban Society'. <http://www.urbanscreens.org/>



2006  
Everyware: The  
Dawning Age of  
Ubiquitous  
Computing, Adam  
Greenfield



2006

## Everyware: The Dawning Age of Ubiquitous Computing, Adam Greenfield

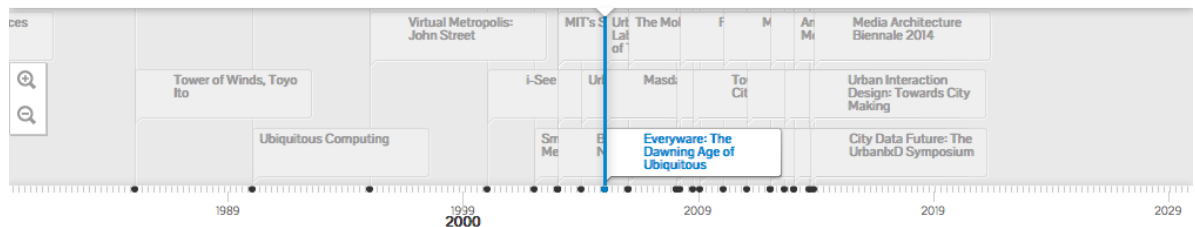
Smart buildings, smart furniture, smart clothing... even smart bathtubs. networked street signs and self-describing soda cans. Gestural interfaces like those seen in Minority Report. The RFID tags now embedded in everything from credit cards to the family pet. All of these are facets of the ubiquitous computing author Adam Greenfield calls "everyware." Greenfield explains how everyware is already reshaping our lives, transforming our understanding of the cities we live in, the communities we be-



2005  
Urban Screens  
Conference



2006  
Urban Informatics  
Research Lab,  
Queensland  
University of  
Technology



2006

## Urban Informatics Research Lab, Queensland University of Technology



2006

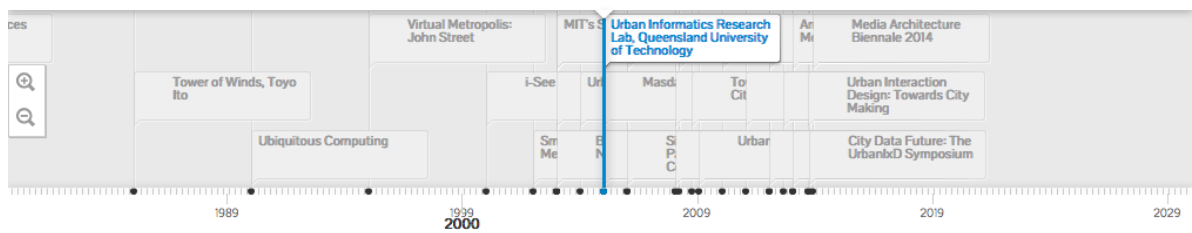
Everyware: The  
Dawning Age of  
Ubiquitous  
Computing, Adam  
Greenfield

Since 2006, the Urban Informatics Research Lab has conducted research and development across people, place and technology with a focus on cities, location-based services, and mobile technology. The team is transdisciplinary in that it comprises and collaborates with architects with degrees in media studies, software engineers with expertise in urban sociology, human-computer interaction designers with a grounding in cultural studies, and urban planners with an interest in digital media and social networking. Part of the QUT School of Design, the research lab embraces the creative energy of a range of disciplines across technology, social media, digital fabrication, and urban design.



2006

Masdar City



2006

## Yellow Chair Stories, Anab Jain and Tom Jenkins (Yellow Chair San Jose)

Yellow Chair Stories was an experiment in service design, demonstrating how identity and personal space can be affected by interminglings of the physical and the virtual. For ISEA 2006, Anab collaborated with Tom Jenkins to propose 'Yellow Chair San Jose', developing the 'Yellow Chair Stories' project further in the context of that hub of technology and commerce. Using several communication strategies in advance of the conference, they created a local network between a local household in San



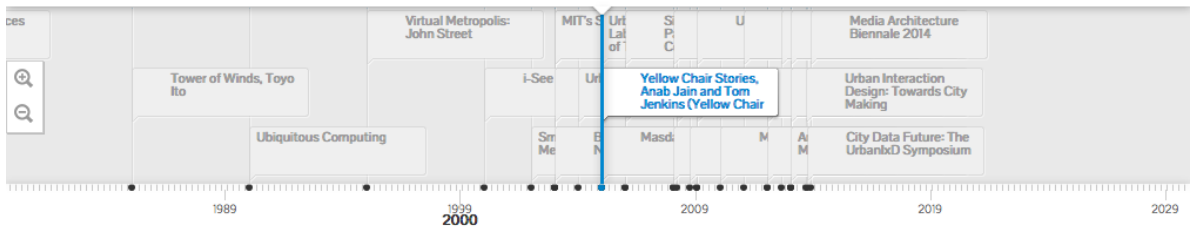
2006

Urban Informatics  
Research Lab,  
Queensland  
University of  
Technology



2006

Masdar City







2006  
Urban Informatics  
Research Lab,  
Queensland  
University of  
Technology



2006

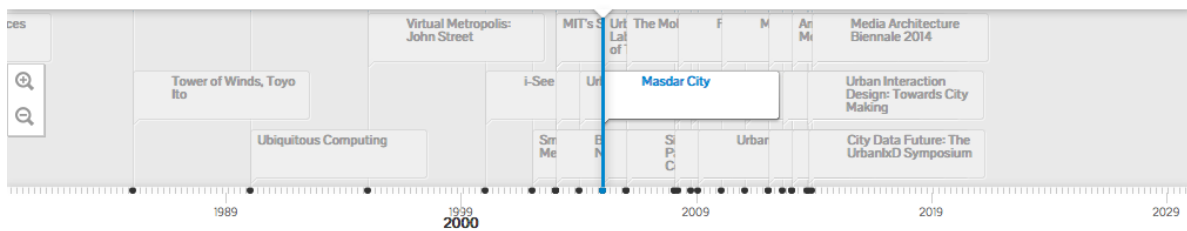
## Masdar City

Designed by Foster + partners, Masdar City combines state-of-the-art technologies with the planning principals of traditional Arab settlements to create a desert community that aims to be carbon neutral and zero waste. The 640-hectare project is a key component of the Masdar Initiative, established by the government of Abu Dhabi to advance the development of renewable energy and clean-technology solutions for a life beyond oil. The masterplan is designed to be highly flexible, to allow it to benefit from emergent technologies and to respond to lessons learnt during the implementation of the initial phases.

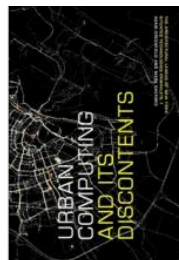
<http://www.fosterandpartners.com/projects/masdar-development/>



2007  
Situated  
Technologies  
Pamphlets 1:  
Urban Computing  
and its  
Discontents,  
Adam Greenfield  
and Mark Shepard



2006  
Masdar City



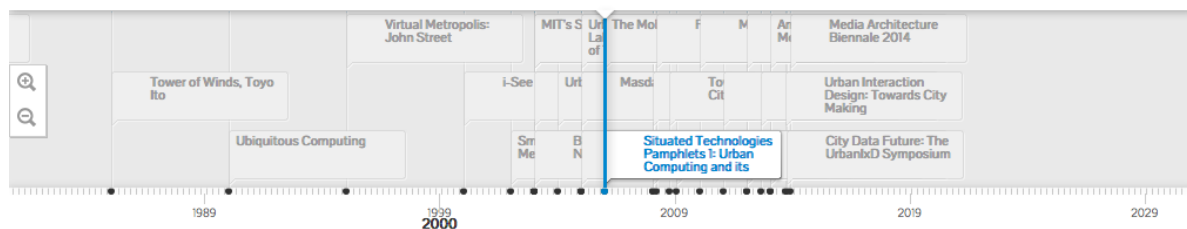
2007

## Situated Technologies Pamphlets 1: Urban Computing and its Discontents, Adam Greenfield and Mark Shepard

A conversation between the authors providing an overview of the key issues, historical precedents, and contemporary approaches to designing situated technologies and inhabiting cities populated by them. <http://www.situatedtechnologies.net>



2007  
The Mobile City





2007

## The Mobile City

The Mobile City is an independent research group founded in 2007 by Martijn de Waal and Michiel de Lange. The Mobile City investigates the influence of digital media technologies on urban life, and the implications for urban design. We like to collaborate with institutions, organizations and individuals from various disciplines who share our interest in these issues. <http://www.themobilecity.nl/>



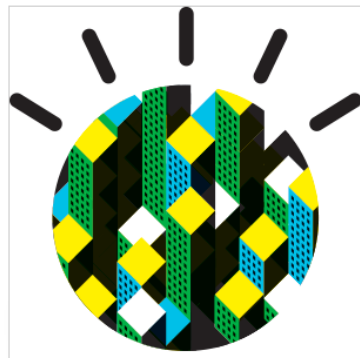
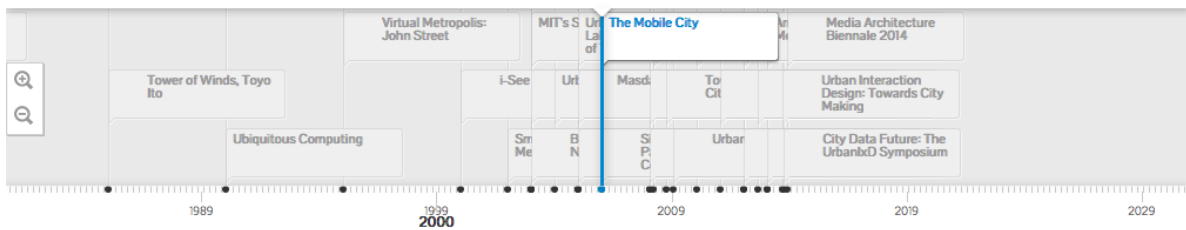
2007

Situated Technologies  
Pamphlets 1:  
Urban Computing  
and its  
Discontents,  
Adam Greenfield  
and Mark Shepard



2009

Smarter Cities,  
IBM



2009

## Smarter Cities, IBM

Smarter Cities is an initiative of IBM Smarter Planet, created to provide hardware, middleware, software and service solutions for city governments and agencies. The solutions implement existing IBM technology such as IBM cloud computing, analytics, mobility and social business. To date, Smarter Cities serves thousands of cities around the world in all areas of management including public safety, health and human services, education, infrastructure, energy, water, and environmental.

[http://www.ibm.com/smarterplanet/us/en/smarter\\_cities/overview/](http://www.ibm.com/smarterplanet/us/en/smarter_cities/overview/)



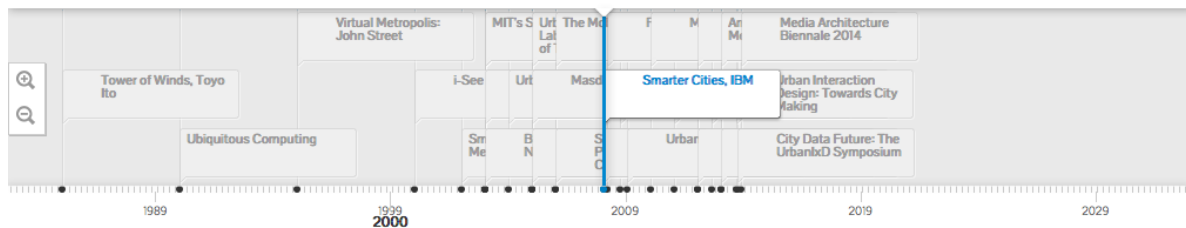
2007

The Mobile City



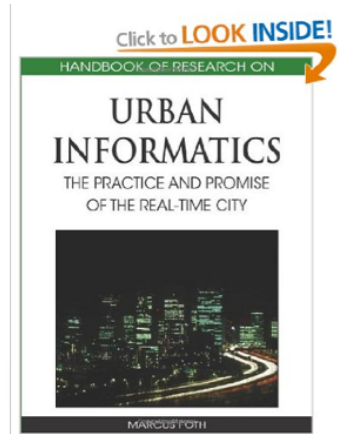
2009

Handbook of  
Urban Informatics:  
The Practice and  
Promise of the  
Real-Time City,  
edited by Marcus  
Foth





2009  
Smarter Cities,  
IBM



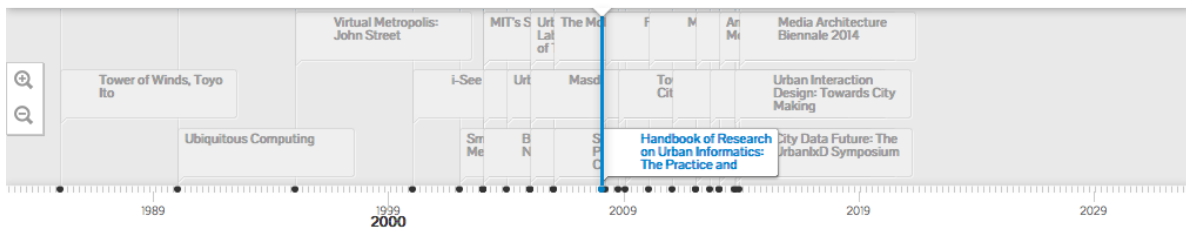
2009

## Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City, edited by Marcus Foth

Sampling the 'dishes' prepared for this urban smorgasbord will take you on a tour de force covering a great range of timely and significant topics and issues such as sustainability, digital identity, surveillance, privacy, access, environmental impact, ac-



MARCH 1,  
2009  
Foursquare  
Launched



2009  
Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City, edited by Marcus Foth



March 1, 2009

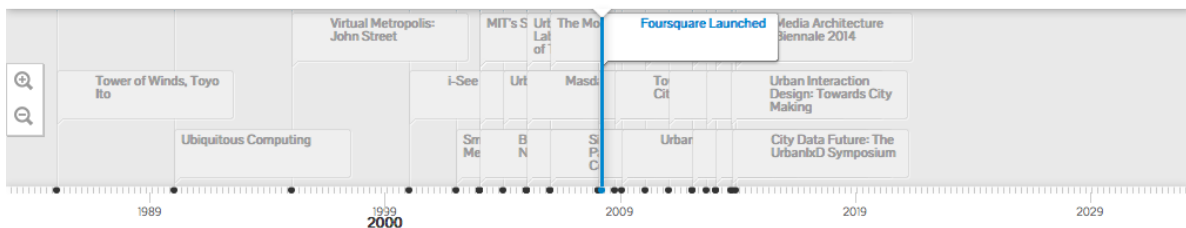
## Foursquare Launched

Foursquare makes apps that help people keep up and meet up with friends, and discover great places. Swarm is for people who want the fastest and easiest way to connect with their friends. The Foursquare app is for explorers who want to know about the best spots, and to share what they've found with others.

<https://foursquare.com/about>



SEPTEMBER  
17, 2009  
Toward the  
Sentient City,  
exhibition





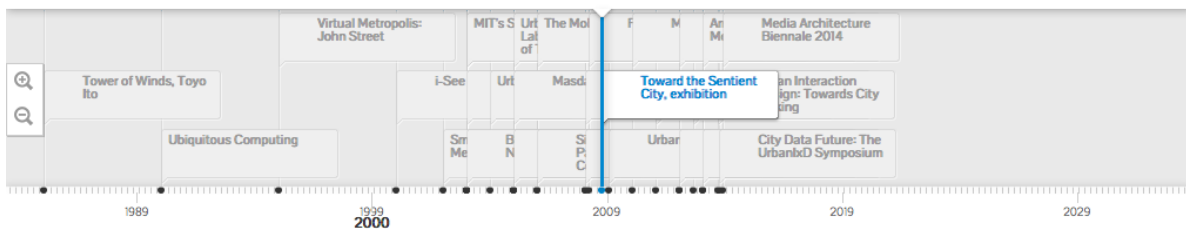
◀  
MARCH 1,  
2009  
Foursquare  
Launched

September 17, 2009 — November 7, 2009

## Toward the Sentient City, exhibition

Curated by Mark Shepard and organized by the Architectural League of New York. The exhibition examined the relationship between ubiquitous computing, architecture and the city in terms of the active role its citizens might play – or neglect to play – as both designers and inhabitants, in the unfolding techno-social situations of near-future urban environments. <http://www.sentientcity.net/exhibit/>

▶  
2010  
Urbanscale



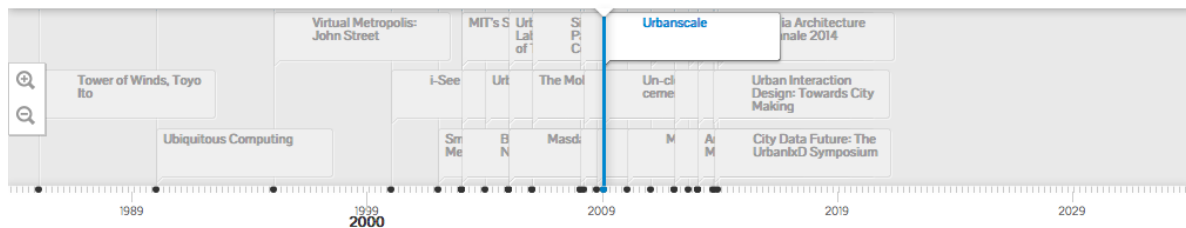
◀  
SEPTEMBER  
17, 2009  
Toward the  
Sentient City,  
exhibition

2010

## Urbanscale

Urbanscale was founded by Adam Greenfield in 2010 to bring a human-centered perspective to the design of products, services, and spatial interventions wherever networked information technology intersects the urban condition, for the benefit of everybody who lives, works, strives, and dreams in the world's cities. <http://urbanscale.org/>

▶  
2010  
Un-cloud your  
files in cement!  
Aram Bartholl





2010  
Urbanscale



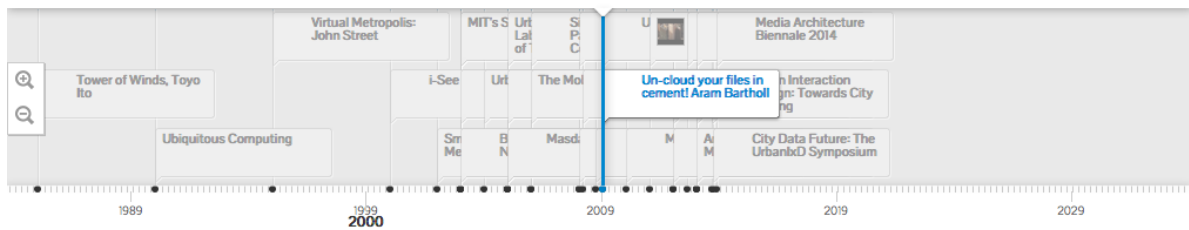
2010

## Un-cloud your files in cement! Aram Bartholl

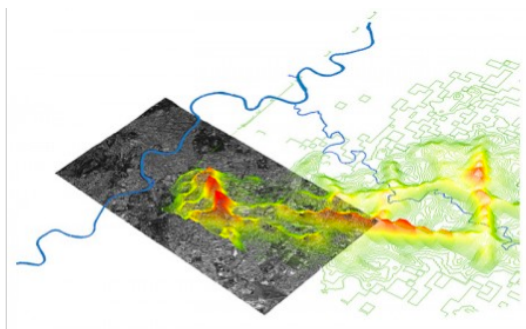
'Dead Drops' is an anonymous, offline, peer to peer file-sharing network in public space. USB flash drives are embedded into walls, buildings and curbs accessible to anybody in public space. Everyone is invited to drop or find files on a dead drop. Plug your laptop to a wall, house or pole to share your favorite files and data. Each dead drop is installed empty except a readme.txt file explaining the project. 'Dead Drops' is open to participation. If you want to install a dead drop in your city/neighborhood follow the 'how to' instructions and submit the location and pictures. Aram Bartholl is a Berlin based media artist and started the 'Dead Drops' project in 2009.



2011  
Mesh Cities website



2010  
Un-cloud your files in cement!  
Aram Bartholl



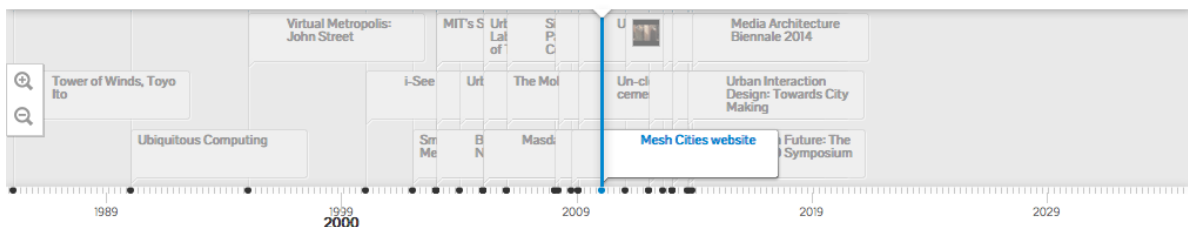
2011

## Mesh Cities website

The term MESH Cities describes the information feedback systems created in 21st Century cities when mobile communications networks, smart city infrastructure, ubiquitous computing, and social networks overlap. Some urban designers speculate that the user feedback these systems allow will improve the livability of modern cities. The term owes its genesis to a number of theorists who have explored the effect communications networks have on the use and design of cities. A partial list includes Teilhard de Chardin's Noosphere, Buckminster Fuller's synergetics, Christine Boyer's Agoric Systems, Adam Greenfield's Urban Operating System, R. Ouellette's Virtual Metropolis, and others. MESH is an



2012  
The Human Scale film





2011  
Mesh Cities  
website



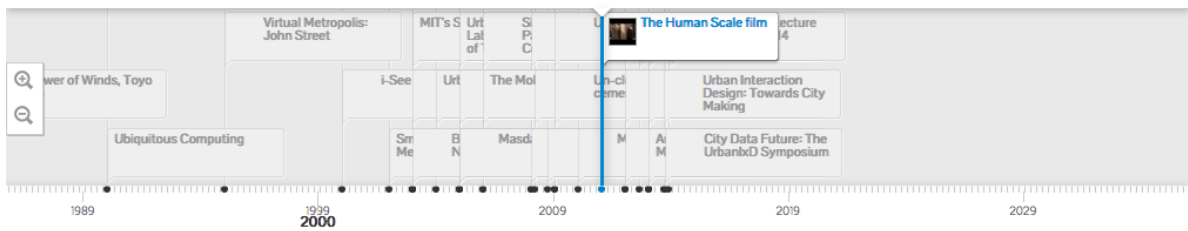
2012

## The Human Scale film

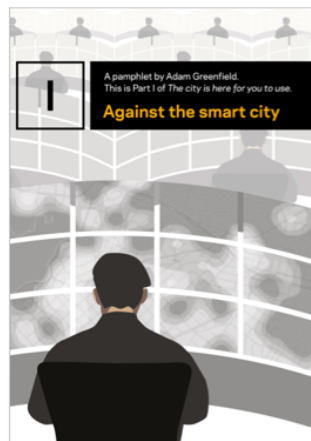
50 % of the world's population lives in urban areas. By 2050 this will increase to 80%. Life in a mega city is both enchanting and problematic. Today we face peak oil, climate change, loneliness and severe health issues due to our way of life. But why? Jan Gehl has documented how modern cities repel human interaction, and argues that we can build cities in a way, which takes human needs for inclusion and intimacy into account.



2013  
Against the Smart  
City, a pamphlet  
by Adam  
Greenfield



2012  
The Human Scale  
film



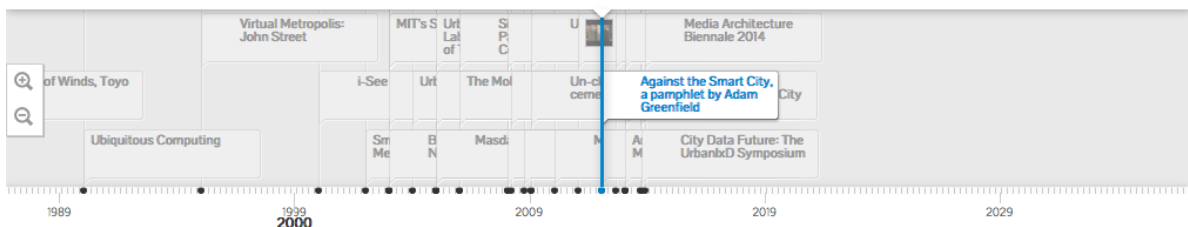
2013

## Against the Smart City, a pamphlet by Adam Greenfield

From the smartphones in our pockets and the cameras on the lampposts to sensors in the sewers, the sidewalks and the bike-sharing stations, the contemporary city is permeated with networked information technology. So what does the future hold for our increasingly technologized urban places? Who decides how this technology is used? For whose benefit is it deployed, and in whose interests?



2013  
Smart Cities: Big  
Data, Civic  
Hackers, and the  
Quest for a New  
Utopia







2013  
Against the Smart  
City, a pamphlet  
by Adam  
Greenfield



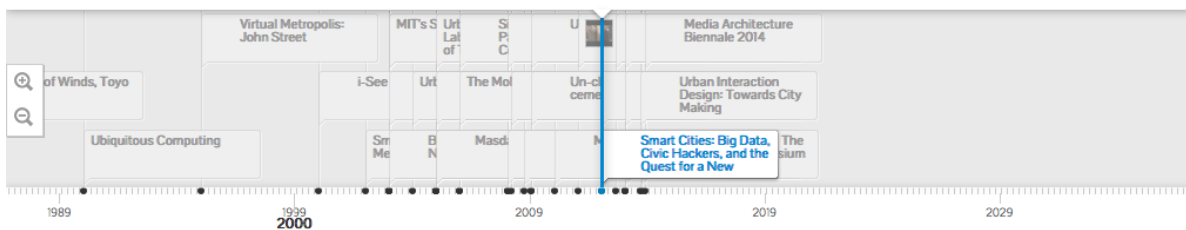
2013

## Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia

In Smart Cities Anthony Townsend explores the question of what happens when computers take over the city in this era of mass urbanisation and technological ubiquity, taking a look at the people and forces that have transformed the design of cities and information technologies. From the great industrial metropolises of the nineteenth century to today's megacities, new technologies have been invented to address the challenges posed by human settlements of ever-greater size and complex-



AUGUST 24,  
2013  
The UrbanxD  
Summer School



2013  
Smart Cities: Big  
Data, Civic  
Hackers, and the  
Quest for a New  
Utopia



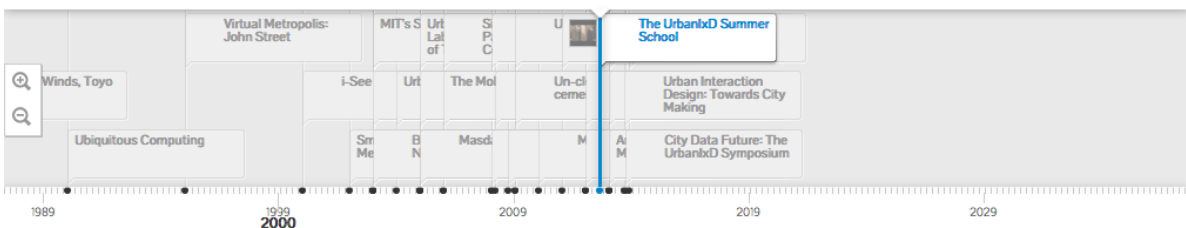
August 24, 2013

## The UrbanxD Summer School

The UrbanxD project Summer School in Split, Croatia was an interdisciplinary interaction design event. There was a line up of inspirational speakers, and participants worked in groups lead by experienced atelier leaders. At the end of the week, the work, inspired by a critical design/design fiction approach, was presented as an open exhibition.



2014  
The City as  
Interface, How  
New Media Are  
Changing The City  
by Martijn De  
Waal





AUGUST 24,  
2013  
The UrbanxD  
Summer School



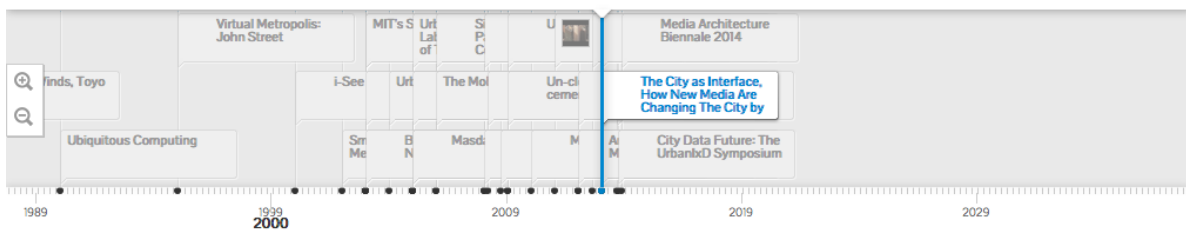
2014

## The City as Interface, How New Media Are Changing The City by Martijn De Waal

This book is the result of my fascination for both technology and cities. My main interest is not so much in technology itself, but in the way it is shaped by society and how in turn technology has the affordance to re-shape our society. This time around, digital and mobile media are changing the way urban life takes shape and how we experience our built environment. More and more, we are experiencing the city through the interfaces on our (mobile) screens and



2014  
Amsterdam  
Hackable  
Metropolis



2014

## Amsterdam Hackable Metropolis

Amsterdam Hackable Metropolis is a research project that examines how citizens, design professionals and institutions can take into account the role of new, digital technologies in society and redefine their roles in a democratic 'city making' process. Context 'Smart Cities' vs 'Smart Citizens' Main research Questions: What is the role of new media in engaging citizens in a 'hackable' city making process? Which are the opportunities and challenges for citizens, design professionals and institutions in a 'hackable' city making process?



2014  
The City as  
Interface, How  
New Media Are  
Changing The City  
by Martijn De  
Waal



2014  
Leimert Phone  
Company





2014  
Amsterdam  
Hackable  
Metropolis



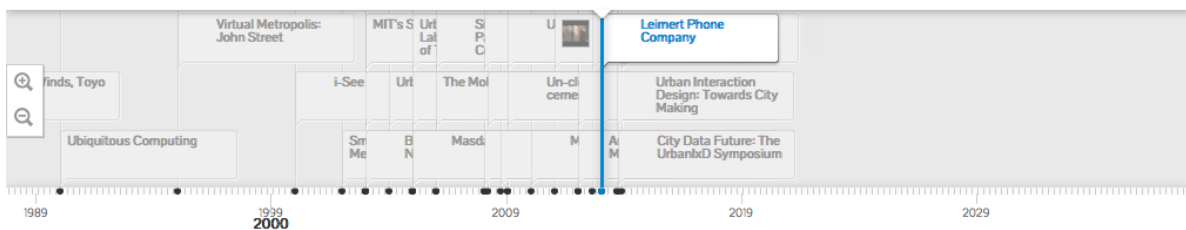
2014

## Leimert Phone Company

Who is calling? An ongoing experiment at the cutting edge of transmedia, bottom-up tech, and neighborhood storytelling. Each design brings a distinct vision to engage the public, preserve local culture, and tie to sustainable business. <http://leimertphonecompany.net/>



SEPTEMBER  
6, 2014  
Urban Interaction  
Design: Towards  
City Making



2014  
Leimert Phone  
Company



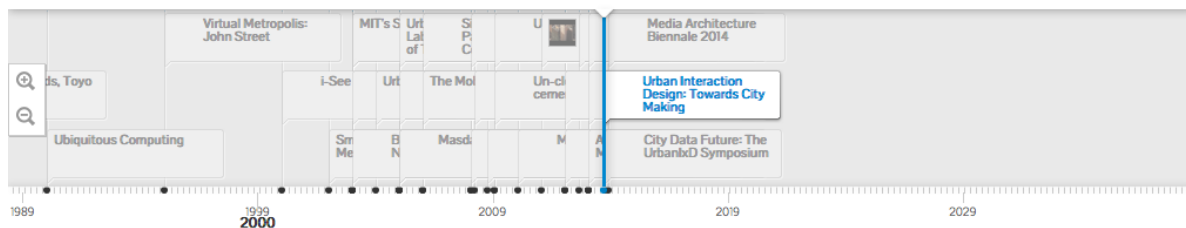
September 6, 2014

## Urban Interaction Design: Towards City Making

How do you describe emerging trends within a forming field? In this book, produced by the UrbanxD project, you will find a distilled conversation, filtered through the collective and embodied practices and experiences of eight diverse individuals. We cannot claim that the result is a perfect representation of the current situation. However, because of the experience, commitment and generosity of the contributors, this book does now exist. We have, in our hands and online, an attempt to characterize and discuss the emerging trends within urban interaction design, freely avail-



SEPTEMBER  
25, 2014  
City Data Future:  
The UrbanxD  
Symposium







SEPTEMBER  
6, 2014  
Urban Interaction  
Design: Towards  
City Making



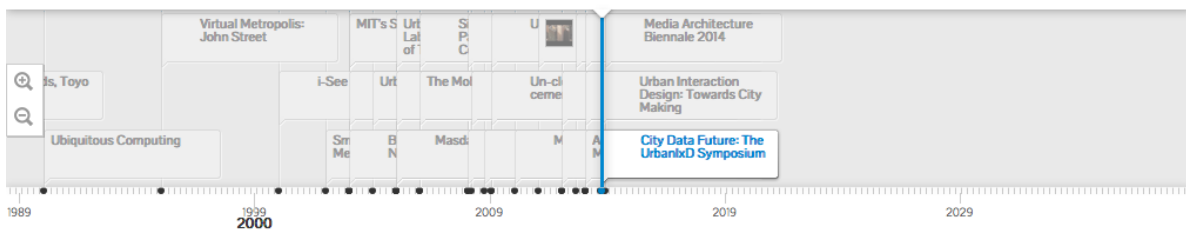
September 25, 2014

## City Data Future: The UrbanxD Symposium

Alongside the exhibition taking place in Venice, the UrbanxD EU project is presenting a one-day symposium to encourage debate and discussion around the themes of the exhibition, and of the UrbanxD project itself. This exhibition is a culmination of the work that has been carried out over the two-year duration of the UrbanxD project, in particular the work of the Summer School held in 2013.



NOVEMBER  
20, 2014  
Media  
Architecture  
Biennale 2014



SEPTEMBER  
25, 2014  
City Data Future:  
The UrbanxD  
Symposium



November 20, 2014

## Media Architecture Biennale 2014

Media architecture transforms cities, buildings, and people. Find out how at the Media Architecture Biennale 2014 – and join the world's top experts in discussing and outlining the media architecture of the future. The biennale takes place on 20-22 November 2014 in Aarhus, Denmark and brings together architects, academia, and industry from around the globe.

<http://www.mab14.org>

