Presentation

Surveillance Chess: Hacking into Closed-Circuit Surveillance—Municipal Surveillance as a Subject of Artistic Fieldwork

2

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Abstract

London. On the brink of the Olympic Games. Equipped with an interfering transmitter, the authors hack surveillance cameras in London and assume control. They replace the real-time surveillance images with an invitation to play a game of chess. The security staff's surveillance monitor located in the control room becomes a game console. The six minute video shows the intervention from the point of view of the CCTV operator. <http://vimeo.com/46236909>

Static from Surveillance Camera 2008-2014

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Introduction

Static. When we were kids, we used to call it “snowstorm” when black and white dots flickered on the TV screen at night after the broadcasting programme had come to an end. We continue on our way, but then the static on the small screen changes imperceptibly from flickering specks into grey lines; the sh-sh-sh sound gets softer, stops altogether. Suddenly soft music, first barely audible, then louder: muzak. At the same time, the grey lines ever more distinctly draw the image of an austere interior: bare, functional, a column at the centre, in the background a glass door, to the right a notice board. At first the scene is black and white, then gradually takes on colour, a bit too yellow, a bit too bright. Potted plants, in one corner a red plush chair. Unexpectedly, there is movement in the background. An out-of-focus something pushes through the glass door, comes closer, towards the column. Hardly recognizable at first, it makes its way into the centre of the scene and our attention. It is an old man, sitting as though sunken in a wheelchair and pushing himself backwards through the empty, Spartan room with small, stiff movements of his feet.

As we watch the scene in a state of near hypnosis, we have come to a halt. Now we look up. We are standing in front of the “Nova Vita Seniorenresidenz” (Nova Vita Retirement Home) in Essen. What we see are the images recorded by the surveillance camera in its lobby, which we receive with wireless video receivers we have built ourselves. The scene is happening now, live, behind the façade in front of us. We are looking into the building from the outside, as it were. It is July 16, 2010 and we are on a tour of the city with participants during the opening weekend of *Hacking The City* at Museum Folkwang in Essen.

Stills from Surveillance Camera at Nova Vita Seniorenresidenz, Essen, 2010

Drifting

For some time now, we have been inviting interested persons on walking tours of the CCTV-monitored cities of Europe. Equipped with mobile video reception devices, we set out through city centres in search of surveillance camera signals. As soon as we enter the range of a wireless video surveillance camera, we receive the video image recorded by that camera—the same image received by the person monitoring the site.

Taking our cue from situationist psychogeography, we call these walking tours “dérives”. We tap into the incessant flow of real-time imagery from surveillance cameras, letting the camera signals guide us through the city. We drift through the urban landscape, following signals, letting them guide us aimlessly and opening us up to new views. It is a playful tool for exploring cities, taking us off our predictable paths by letting us explore previously unknown views and imagery of our cities.

From left to right: Portable monitor capturing surveillance camera footage from a Zurich police station, 2009;
Participants with devices drifting through Essen, 2010;
Participants in Sao Paulo waving to the surveillance camera after finding its location, 2008

Surveillance cameras are integral elements of the present-day city's topology. They generate an unceasing flow of real-time imagery recording the now, regardless of whether anything worthy of notice is happening. They create a perpetual succession of images of random ordinary events and actions which only take on relevance—and receive public attention—when something out of the ordinary occurs. These ceaseless streams of images are normally deleted again—without ever being seen—in the moment of their generation. They are constantly being broadcast, but often there is nothing receiving them. They therefore do not document anything, but are like vestiges of the undirected need of an omnipresent control regime to communicate.

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Sousveillance
Through the hidden City: Tools for
A Derive with !Mediengruppe Bitnik

5 Sunday 12th May 2009
Goldsmiths College London

CCTV - A Trail of Images

DeFord TV and !Mediengruppe Bitnik present

CCTV: A Trail of Images

After a short introduction to Sousveillance and CCTV film making, we will set out on a walk through Deptford and South London. Equipped with CCTV video signal receivers we will let the incoming surveillance camera signals lead us through the city. The CCTV video signal receivers will catch surveillance camera signals in public and private spaces and make them visible: surveillance becomes sousveillance. By making images visible which normally remain hidden, we gain access to the 'surveillance from above' enabling us to use these images for a personal narrative of the city.

Workshop with construction manual for later DIY!
Attendance free

Next Dates:
Kunst Halle St. Gallen, Switzerland
Saturday, 30 May 2009
Kunstraum Walcheturm Zurich, Switzerland
Tuesday, 09 June 2009
[plus in Basel, Switzerland
Saturday, 20 June 2009

How To Build a Surveillance Camera Sniffer

2.4GHz 4 channel wireless camera receiver (on ebay for USD20, from Maplin around £25)

Rechargeable battery pack (6 - 12V, according to type). Check how much power your receiver consumes (if your receiver consumes 300 mAh and your battery pack has a total of 1200 mAh, your setup will last for 4h)

Output/Recording device: DV-camera or small TV device, both with audio/video-in (A/V-in)

A/V cables to connect between output device and wireless surveillance receiver

Artistic Practices w. Surveillance Cameras

Surveillance Show and other projects
Jill Magid (2000 - 2008)
<http://jillmagid.net/>
(in)security camera
b. chang, s. ruzanaka and d. strakovsky (2003)
<http://www.vitagiri.com/art/insecurity.html>
The Surveillance Camera Players
<http://www.noctored.org/the-scp.html>
Life: A User's Manual
Michelle Teran (2003)
<http://www.ubermatic.org/life/>
The Commercial
Mediashed (2006)
<http://www.mediashed.org/?q=videoconfession>
Manifesto for CCTV Filmmakers
Manu Lachh, Ambient TV (2006)
<http://www.ambienttv.net/content/?q=manifesto>
Pooleas
Manu Lachh, Ambient TV (2002-2006)
<http://www.ambienttv.net/content/Faceless>

Points of Interest

Points of Interest

CCTV: A Trail of Images, fanzine for Dérive in London 2010

With *CCTV: A Trail of Images*, we tap into this ceaseless flow of images, accessing, inhabiting a city section generally inaccessible. To this end, we take what is usually stationary reception equipment and convert it into mobile, portable devices that become the guiding medium of our tours of the town. The video receivers give us access to a media layer of the city that normally remains invisible—concealed worlds of imagery, interior and exterior views of the urban space. What images of the city, of space, of action do they generate; what stories do they tell us about the city? What is the appeal of images that, under normal circumstances, never leave their closed circuit? And to whom do they belong?

When the mobile video receivers are not within range of a CCTV camera, they show flickering white noise. As soon as the receiver comes close enough to a video signal, however, the static on the screen turns into a discernible image, and the closer the source the more distinct the image received. In an urban topology, the search for a transmitter becomes a detective-like zig-zag, because—owing to signal reflections and duplications on walls and facades—it is not always possible to track down the source by moving in a straight line. What makes the undertaking all the more difficult is that the camera perspective is often contrary to the usual human view of a space. The camera often looks down on the scene at an oblique angle from above, making it hard to discern what it is actually seeing, even when the reception is clear. The CCTV *dérives* accordingly resemble a kind of investigative game in which the players try to trace the virtual camera views to real rooms and spaces. In the process, they frequently become acquainted with districts, places, squares, courtyards and routes outside their usual urban paths. And even on familiar paths, the devices provide unsuspected insights into interiors otherwise closed to view.

From top left:
Still from surveillance camera inside back room of a shop, Rotterdam, 2008;
Still from surveillance camera, Santa Efigênia, São Paulo, 2008;
Still from surveillance camera, shop, Essen, 2010;
Still from surveillance camera filming church entrance with stoup, Warsaw, 2011;
Still from surveillance camera at the Royal Exchange, London, 2012;
Still from surveillance camera filming a street, London, 2012;
Still from surveillance camera inside Mosque, Frankfurt, 2012

Surveillance Chess—Hijacking CCTV Cameras in London

By obtaining access to these surveillance images, we bring about a shift of power: “surveillance”—watching from above—becomes “sousveillance”—watching from below. Monitored cityscapes become a

stage for performances, for interventions, for playfully shifting the power-relations within surveillance settings. Yet is it possible to not only shift the balance of power inherent to the surveillance setting, but to reverse it altogether?

The CCTV operator in his control room has total power over his or her system: s/he is the all-seeing observer of the public space in front of his or her camera. Until !Mediengruppe Bitnik obtains access to his or her system and take over. Equipped with an interfering transmitter, we hack surveillance cameras and assume control. We replace the real-time surveillance images with an invitation to play a game of chess. The security staff's surveillance monitor located in the control room becomes a game console. But the invitation to play chess makes it clear that the unfriendly takeover is intended to be friendly: The game establishes equality between observer and observed. And the otherwise one-directional surveillance system suddenly becomes a communication channel.

(Un)friendly Takeover

London. On the brink of the Olympic Games. A tube station in one of the most monitored public spaces in the world. We intercept the signal of a surveillance camera and see business people making their way to the Underground, a man in a suit looking for the right exit. Then, from the left, a woman with a yellow suitcase walks into the frame of the surveillance camera. She opens her suitcase and activates a switch. This is the moment when we take over the surveillance system and assume control. The surveillance image drops out, a chess board appears on the surveillance monitor and a voice from the loudspeakers says: "I control your surveillance camera now. I am the one with the yellow suitcase". The image abruptly starts flickering and jumps back to the woman with the yellow suitcase. Then the image switches to the chess board again. "How about a game of chess?" the voice asks. "You are white. I am black. Call me or text me to make your move. This is my number: 07582460851".

Stills from Surveillance Chess, !Mediengruppe Bitnik, 2012

Surveillance Chess is an art performance for a single recipient: the CCTV operator in his/her control room. The takeover lasts five minutes, then the chess signal switches off and the usual surveillance scene appears on the monitor once again.

The invitation to play is intended as a means of breaking through the power structure of the surveillance situation. The game introduces equality to the hierarchic relationship between the observer and the

observed. It moreover opens up a level of communication which—thanks to involvement in a joint game and the acceptance of joint rules—makes an encounter between equals possible.

Although we took over nearly twenty signals during the three-day performance in London, not one of the surveillance camera operators accepted the invitation to play chess. In many cases the intervention gave rise to discussions with the operators. Without exception, the arguments revolved around the issue as to who owns the images broadcast into the public space by private surveillance cameras, the rationale of surveillance, the art of the chess game, and—not least of all—the legality of our intervention.

During the research phase for *Surveillance Chess*, the owner of a jewellery shop in Essen threatened to call the police when we tapped into the images of his surveillance camera and invited him for a game of chess. He did not call the police after all, but removed his own surveillance camera from his shop “for security reasons”. He had apparently lost faith in his own surveillance system.

Stills from Chess for CCTV Operators, research for Surveillance Chess in Essen, !MediengruppeBitnik, 2010

Surveillance Chess exhibition views from La GaîtéLyrique, Paris 2012. Exhibition images courtesy MaximeDufour

The work *Surveillance Chess* shows that it is possible to playfully intervene into surveillance systems in public spaces. It also shows how easy it is not only to shift the power structure of these systems, but to reverse it altogether. The six minute two-channel video shows the intervention from the point of view of the CCTV operator.

Surveillance Chess video:

<http://vimeo.com/46236909>

Additional Information on Surveillance Chess:

<http://bitnik.org/s/>

<http://chess.bitnik.org>

Map of Surveillance Chess Interventions in London:

http://chess.bitnik.org/london_chess_map.html

About !Mediengruppe Bitnik

!Mediengruppe Bitnik live and work in Zurich, CH and London, UK. Using Hacking as an artistic strategy, their works re-contextualise the familiar to allow for new readings of established structures and mechanisms. Paying close attention to the implications that networked systems have on contemporary societies, their works formulate fundamental questions concerning accessibility, power dynamics and socio-political structures.

They have been known to bug the Zurich Opera, giving the outside public access to the live performances on stage by retransmitting them to people's homes by telephone. In one of their most recent works !Mediengruppe Bitnik sent a parcel to Wikileaks founder Julian Assange at the Ecuadorian embassy. The parcel contained a camera which broadcast its journey through the postal system live on the internet. They call this work a system-test and a live mail art piece.

Their works have been shown internationally at La GaîtéLyrique Paris, NiMk Amsterdam, Space Gallery London, BAC Bâtiment d'art contemporain Geneva, HMKV Dortmund, Beton7 Athens, Share Torino, Museum Folkwang Essen, Ars Electronica Linz, Contemporary Art Center Vilnius, and Kunsthau Zurich. Among other prizes, their work was awarded the Swiss Art Award, the Golden Cube from Kassel DokFest and a Honorary Mention from Prix Ars Electronica.