



Eyes & apps on the streets

From natural surveillance to crime sousveillance
A seminar on social control in the digital era



Every year we organize at KTH an international arena of discussion on safety related topics directed to academics, practitioners and society in general. This year's seminar was about surveillance, social control and guardianship in the digital era. This is our 7th international seminar but the first as part of *Safeplaces network*. Thanks to The Swedish National Council for Crime Prevention (BRÅ) for making this event possible and to my team at KTH for all the support.

We are also grateful to all scholars who offered their own perspective on the topics regarded in this seminar. They provided excellent examples of how technology is impacting the way people use public space. Others illustrated how current technological development has affected our understanding of situational conditions of crime and crime control. As many in the audience pointed out, technology creates a number of opportunities but also imposes risks and new challenges. Thanks to all presenters for such a great seminar!

In this booklet you will find a summary of the issues discussed in the seminar. A big thanks goes to four members of the *Safeplaces network* (Agneta Mallén, Asifa Iqbal, Karl Kronkvist and Sofie Kirt Strandbygaard) who kindly agreed in making public their private notes of the talks to compose this booklet.

Enjoy the reading!

Vania Ceccato, coordinator of Safeplaces network

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Opening

Vania Ceccato and Johan Lindblad

Vania introduced the seminar illustrating the relevance of the topic to today's society and stated the aim of the seminar:

'to promote a forum of discussion about the nature of surveillance, guardianship and social control in the digital era'.

Johan highlighted the importance of promoting arenas of discussion, such as this seminar, in which internationally renowned scholars and safety experts can share knowledge and learn from each other.

Vania set the scene for the day by reviewing the historical background of the concept of surveillance. She said that 'surveillance' can be first associated with Jeremy Bentham's *Panopticon* – the notion of being under observation from a central point, the 'big brother', the CCTV camera. Yet, for architects and urban planners the notion of *natural* surveillance have since the 1960s been more central than the 'plain' surveillance. Its importance was highlighted by the seminal work by Jane Jacobs's *The Death and Life of Great American Cities*, and other scholars that followed. Jacobs wrote that:

"in order for a street to be a safe place, there must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street."

This notion has been essential for urban planning theory but also for the development of criminology

itself with the work by Cohen and Felson, Eck and other scholars present at the seminar. The notion of guardians or place managers requires a precondition – the individual's availability. In order to supervise, a guardian first needs to be available, present to be ready to intervene if something happens. But what happens when eyes on the streets are replaced by apps? Who are the street proprietors?

In the era of smartphones, 'eyes' are complemented by 'apps' or body worn cameras, giving expression to new ways of depicting what happens in public space and perhaps redefining the role of guardians and place managers. An incident that happens on the street is still local (attached to a physical place and a pair of coordinates), but can now be seen by far-away eyes, as soon it is shared over the internet. Compared with the old "eyes on the street", the new exercise of guardianship invites a number of other senses than sight, such as touch and sound using personal smartphones, body worn cameras and other devices. It is perhaps what Stephen Mann calls *sousveillance*.

The seminar was planned to include reflections upon the potential impact of these new technologies on crime opportunities and crime prevention.


Vania Ceccato is coordinator of *Safepaces network* (KTH).

Johan Lindblad is project leader at the National Crime Prevention Council (BRÅ).



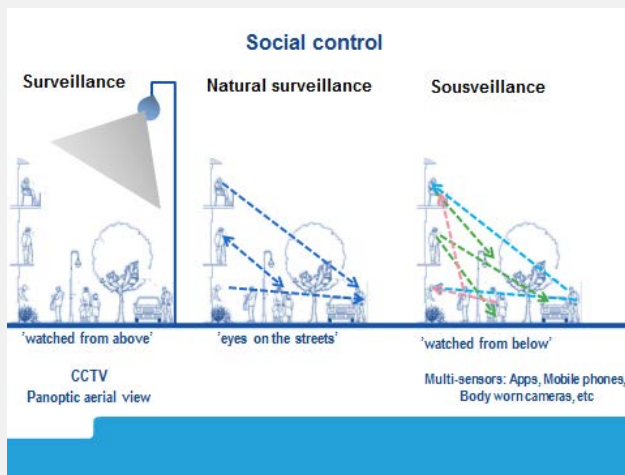

**“Eyes & apps on the streets:
From natural surveillance to crime sousveillance”**
 An international seminar on social control in the digital era

Why care about it?

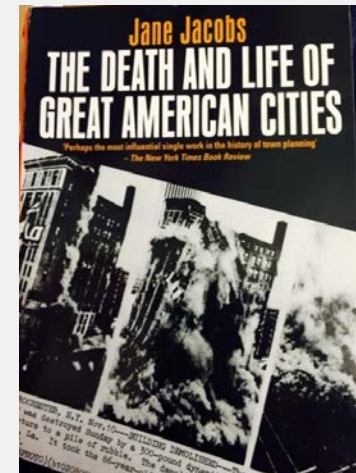


Slides from the opening of the seminar

Re-conceptualization of surveillance: From eyes on the streets to apps on the streets?, Ceccato (2017)



| | Eyes on the streets | Apps on the streets |
|--|---|---|
| 1. Type of activity | Natural surveillance | Sousveillance |
| 2. Basic requirements for action | Presence and availability lead to potential action | No need to be present, app & smartphone in hand. |
| 3. Level of responsibility | Personal/assigned | Diffuse/general |
| 4. Senses | Visual real time, auditory, all senses | Visual remotely, touch the screen |
| 5. Status of action (engagement/neglect) | Immediate and known by the group | Not known by the group |
| 6. Scale | Uniscale (Local to local), asymmetrical | Multiscale (Local, global, global to local) information is added & spread remotely, symmetrical |
| 7. Common environment | 'Context dependent', Micro environments, e.g. windows, façade | Meso-macro context, street, neighbourhood but also 'context irrelevant' |
| 8. Cohesion | More dependent on local social ties | Less dependent on local social ties (?) |
| 9. Access to 'the event' | Time-specific | Priori and posteriori |
| 10. Participation | Imposed by presence, location | Voluntary, at individual and group level |



Programme

| | |
|---|------------------------------------|
| 09:15 - Extending guardianship using surveillance technology | <i>Danielle Reynolds</i> |
| 10:00 - Guardianship – Not too broad, not too narrow | <i>Marcus Felson</i> |
| 10:45 Coffee break | |
| 11:00 - Disrupting crime place networks: The role of surveillance | <i>Tamara Madensen</i> |
| 11:45 - Beliefs about CCTV | <i>Johannes Knutsson</i> |
| 12:30 Light lunch | |
| 13:15 - Body worn cameras as surveillance tool | <i>Elizabeth Groff</i> |
| 14:00 - Real time sousveillance: citizens' live broadcasting of conflicts in public space | <i>Lucas Melgaco</i> |
| 14:45 Coffee break | |
| 15:00 - Mapping the movement of active guardians in time and place | <i>Reka Solymosi</i> |
| 15:45 - The use of ICT to create a "beehive" for data collection and information sharing | <i>Stefan Holgersson</i> |
| 16:30 - Take away messages | <i>Agneta Mallen/Vania Ceccato</i> |

The poster features the KTH logo at the top. Below it, the title "Eyes & apps on the streets: From natural surveillance to crime sousveillance" is displayed, along with the subtitle "An international seminar on social control in the digital era" and the location "School of Architecture & the Built Environment KTH".

Date: 8th September 2017
 Time: 9:00-17:00
 Venue: Valhallavägen 79, Cipari 3A, Mollindalen, Kungälv, Tekniska Högskolan, Stockholm, Sweden

A grid of ten small portraits of the seminar participants is shown below the text. At the bottom, it says "Sponsored by Sakraprojekt" and includes the SP network logo.

Extending the notion of guardianship

Danielle M. Reynald

Danielle spoke about the possibilities of extending informal guardianship through the use of surveillance apps.

Danielle's initial definition of guardianship stems from the theory by Cohen & Felson, describing crime as a consequence of opportunities generated by routine activities. For crime to happen, you need a likely offender to be in contact with a suitable target in the absence of a capable guardian. Danielle underlined the importance of the capable guardian as any person or thing that can serve the function of a guardian just by being present or by being available. In the last 10 years, she has looked at guardianship using different methodologies in both Netherlands and Australia.

Her previous research focused on the residential context and her findings established a relationship between human guardianship and property crime, showing that property crime decreased as guardianship intensity increased, with availability of guardians playing a significant role in the intensity of guardianship at properties.

Her research showed that the level of residential guardianship was affected by several contextual factors including ethnic heterogeneity, income, resident mobility, and physical opportunities for surveillance.

Even when human guardians were available, they supervised infrequently and they did not always intervene. Intervention was amongst others affected by sociodemographic and physical contextual factors, as well as guardianship attitudes including a sense of responsibility for guarding and relationship with neighbors.

With the knowledge from the residential studies of guardianship Danielle looked at the potential to develop the use of surveillance apps, and presented some of the technologies' advantages and challenges. For instance, she suggests that apps still rely on the presence of guardians. They present good guardians with a tool to be better, but what about engaging guardians? She posed several other questions relating the use of apps and questioned the extent to which they promote a 'false feeling' of security. Some of these challenges with the apps can often be perceived in Sweden to be already out of proportion.

Such debates engaged presenters as it touched upon the risk of hacking, the police's experience with racist remarks on neighborhood watch schemes, and the fear of creating an online activity that enhances fear of crime and fear of others. This field is uncharted area in terms of research and practice.

— **Danielle M. Reynald** is one of the most important experts in the subject of guardianship. She is currently a researcher at Griffith University, Australia.



Photo: Bo Grönlund

Guardians & Guardianship

- Routine Activity Approach (Cohen & Felson, 1979)
 - crime opportunities arise as a consequence of routine activities
 - 3 minimal elements for crime
 - *absence of a capable guardian*
 - any person (or thing) who serves by simple presence to prevent crime, and by absence make crime more likely (Felson, 1995)
- Guardianship (Felson & Cohen, 1980):
 - "any spatio-temporally specific supervision of people or property by other people which may prevent criminal violations from occurring"



Guardianship in Action

- Observed in the real world
- Guardianship as multi-dimensional
- Guardianship intensity
 - Availability/Presence of guardians
 - Surveillance or supervision
 - Intervention when necessary
- Associated environmental factors



Remote Surveillance Apps



Surveillance Technologies: Apps

- Issues
 - People have to download and use the app
 - Still relies on sense of responsibility & community engagement
 - Is guardianship being intensified among individuals who are already "good guardians"?
 - Accuracy of information provided
 - How is the information verified?

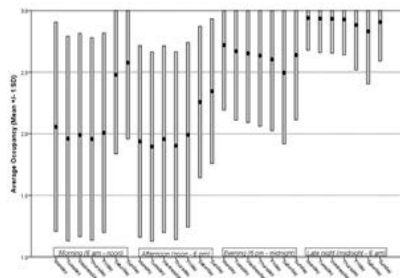


Surveillance Technologies: Apps

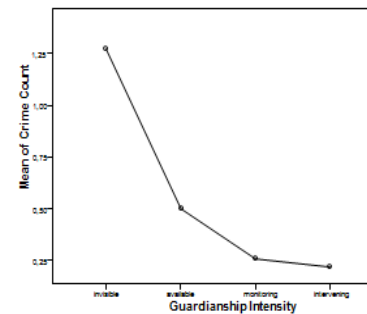
- Advantages
 - Facilitates effective info dissemination
 - Information sharing
 - Enhances neighbourhood watch capabilities
 - Facilitates crime detection
 - Facilitates reporting (indirect intervention)
 - Creates opportunities for direct intervention
 - New data source on guardianship
 - Potential to enhance capability of engaged guardians
 - Even in high crime areas
 - Creates new opportunities for guardianship
 - Outside of own neighbourhood



Availability



Guardianship in Action



Surveillance Technologies: Apps

- Issues
 - People have to download and use the app
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Scholars and practitioners shared knowledge and experience about the advantages and the challenges of working with technology-based crime prevention. Critical issues of personal privacy came constantly into focus as well as methodological problems imposed by these new sets of data (often generated by body worn cameras, live streaming information, data from mobile devices, social media and other internet tools). The analytical part was also highlighted by several presenters, in particular, the need of methods to better transform this 'new' information into valuable non-biased evidence in crime control/prevention and safety planning.

Guardianship – Not too broad, not too narrow

Marcus Felson

Marcus started out by making a distinction between overt and covert crime: An overt crime affects a whole neighborhood, while a covert crime only impinges to those directly affected. An overt crime is more likely to draw police attention while a covert crime does not. Arguably, an overt crime is 'ten times' as harmful to the neighborhood as a covert crime.

Introducing additional ideas from his forthcoming textbook with Mary A. Eckert, Marcus diagrammed work by Saxe and associates showing that neighborhoods of different income levels are similar in levels of drug abuse. However, those neighborhoods differ greatly in the frequency with which people see drug transactions taking place. Drug crimes, like many other offenses, are much more likely to be overt in the lowest income areas. These areas also have much higher levels of public disorder, often creating a larger problem for the local people than crime itself. These reminders of crime affect a whole neighborhood. Marcus distinguished three crime areas of special importance:

- a) middle class areas, where covert crime is more likely;
- b) entertainment districts, within which middle class people commit their overt crimes; and
- c) overt crime areas.

More specificity in mapping crime also applies to spatial patterns, with crime shifting greatly over the hours of the day, and from weekday to weekend. Specific crime maps of today show that most low-income blocks have no crime; that low-income areas concentrate their crime in specific "bad blocks," where crime is overt.

More specific crime maps force us to modify crime theories and to give up the vague versions of social disorganization theory. The new statistical specificity also impels us to find new prevention and policing strategies, with more attention given to problem-oriented policing. This allows focusing enforcement and design efforts on entertainment districts as well as the bad blocks within minority areas, without bothering the remaining minority zones where crime problems are minimal. Marcus states that in order to apply broken-windows ideas to "engineer out crime," *'we need to know which small things lead to big crimes and which do not'*.

Surveillance can be used to find out when and where people should be asked to go home or where a public park should be re-designed, says Marcus. Administrative law can be used to pressure liquor establishments to avoid creating alcohol problems, reducing the number of arrests required and making entertainment zones safer for women. Parks can be redesigned, also reducing mistreating of and danger to women.

Marcus also made the distinction between activities that are (a) illegal and not tolerated, (b) illegal but tolerated, (c) legal but disapproved and (d) legal and fully approved by society. Often the public complains over legal but disapproved activities, which are damaging for a neighborhood, placing pressures on police to do something. Finally, he suggests that "maintaining public order is a difficult task; police cannot succeed without involving multiple agencies of government and using design techniques to make public places more secure".

Marcus Felson has been a leader not only in crime theory ("the routine activity approach") but also in applying that theory to reducing crime. He is a professor at Texas State University, USA.



Photo: Bo Grönlund

Overt vs Covert Crime

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. occurs in public places 2. seen & heard by many people 3. scares a whole neighborhood 4. likely to draw police attention | <ol style="list-style-type: none"> 1. hidden behind closed doors 2. directly harms rather few people 3. only impinges on those directly affected 4. seldom noticed by police unless a citizen calls to report |
|--|---|

4

Surveillance can be used to inform design and redesign of public space

- If problems are observed, where does it happen?
- What design changes can work?
- Surveillance is not just for arrest
- Can also be used to take people home or to social services
- Where are truant youths hanging out?
- When should people be asked to go home?

16

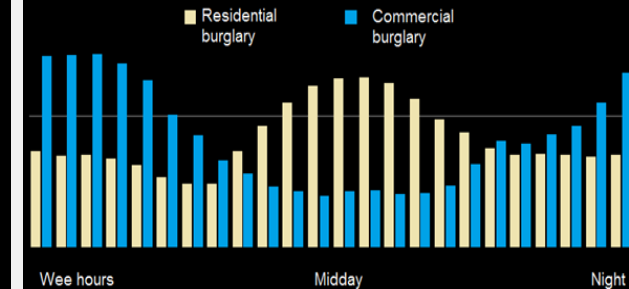
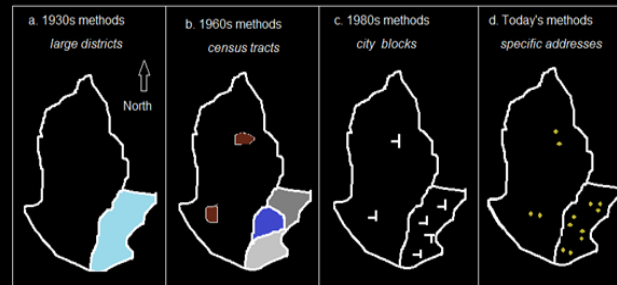
Cuts across legal categories

| Offense | Overt | Covert |
|----------------------------------|-----------------------------|---------------------------------|
| Illicit drug sale | Transacted in a public park | Transacted in private apartment |
| Auto theft | From public street | From private carport |
| Assault | Inside barroom | Inside home |
| Forcible rape | Shadows next to public park | Hidden in building |
| Truancy (absconding from school) | To public square | To private home |

6

Cone of resolution tells us damage can be localized

Crime Maps for the Same City, Four Levels of Resolution, From Large Districts to Specific Addresses



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To what extent the use of these technologies and the new practices they impose, 'blur' the accepted roles of crime controllers, offenders and victims? These were some of the questions stated in this seminar.

Photo: Vania Ceccato

Disrupting crime place networks: The role of surveillance

Tamara Madensen

Tamara discussed the challenges and opportunities that surveillance technologies provide for those who work to disrupt crime-place networks. Like offenders and victims, crime places are networked. These networks are responsible for a large proportion of violent crime that occurs in small micro-locations across urban environments.

Using the example of copper theft in Las Vegas, Nevada (U.S.A.), Tamara showed that investigators only focus where crime occurs (crime sites) and neglect other crime places: (1) convergent settings, routine public meeting places used by offenders; (2) comfort spaces, private offender meeting locations used to stage criminal events or store supplies for crime; and (3) corrupting spots, places that create crime at other places. These last three places play a significant role in the commission of crimes, even though they do not appear on a crime map.

Traditional criminal investigations only highlight known hotspots and rarely address the the other locations in a crime-place network. Place-based investigations can uncover these locations. A place-based investigation project in Cincinnati, Ohio (U.S.A.), produced a significant reduction in violent crime, without evidence of crime displacement.

While there were 18 shooting victims in a small micro-location in 2015, there were only three victims in the same location after the project's initiation.

Despite positive results, there are limitations of crime-place network investigations. The most notable limitation is the time required to complete the investigations. In terms of surveillance, she asks: “what kind of technologies can speed up these investigations?”

Place-based social media surveillance tools can expedite police investigations. An widely available tool, google street view, can provide evidence of place-based activity. However, more advanced surveillance technologies including, Geofeedia, emotion/face API, video indexing, text analytics, and video/image/web macro-search engines can help to uncover offender and place networks. However, there are costs and privacy concerns associated with these new technologies. These concerns must be addressed as police continue to explore surveillance options to more effectively uncover and dismantle crime-place networks.

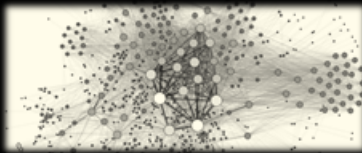
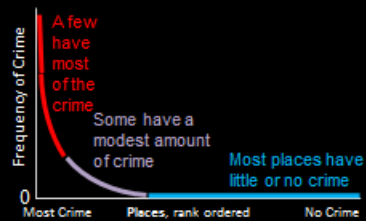
Tamara Madensen is an associate professor of criminal justice and graduate director at the University of Nevada, Las Vegas, USA. Her research and teaching projects involve working directly with police and private security.



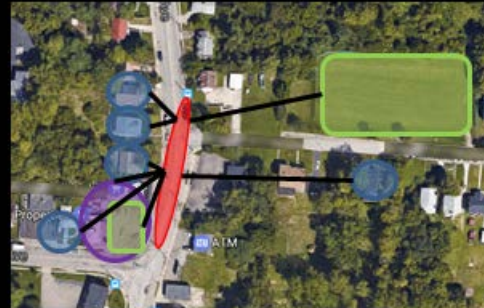
Photo: Bo Grönlund

Evidence Supporting Crime-Place Networks

- Crime is concentrated across places, offenders, victims
 - 80-20 Rule
- Offenders, victims, and crime places are networked.
- Persistent crime hotspots result from overlapping networks.
- Most violent crime, across any city, occurs in small, identifiable micro-locations.



Cincinnati Place-Based Investigations



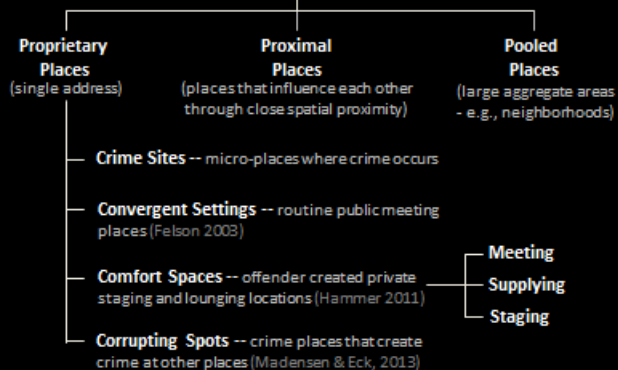
- Crime sites – public street
- Convergent settings – parking lot/park
- Comfort spaces – rentals/vacant property
- Corrupting spots – crumbling structures/store fronts



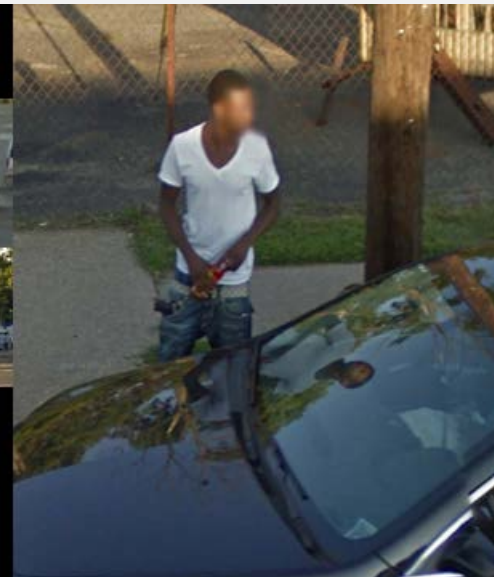
Violent Place Network

Organization of Violent Place Networks

Crime Places
(Madensen & Eck, 2013)



Surveillance



Slides from Tamara Madensen's presentation.

Beliefs about CCTV

Johannes Knutsson

Starting from his own experiences of a Norwegian case supplemented by other evaluation research, Johannes presented a critical review of the current state of evidence (and beliefs) about CCTV's effectiveness in preventing crime.

Impressed by UK colleagues the Oslo police wanted to introduce a CCTV scheme in the city center outside the central railway station in Oslo. Because of possible threats to the citizen's integrity, politicians required that the scheme should be evaluated and implemented on a trial basis.

The evaluation had a pre/post intervention design with three distinct areas: (1) experimental area (camera covered areas), (2) displacement area (out of reach of camera) and (3) a control area. There were indications of some reductions in crime, but the overall strong effects assumed by Oslo police could not be substantiated, even if an interview study showed beliefs in CCTV's effectiveness. The Oslo police did not accept the result and continued with the scheme for several years before it was put to an end.

Swedish evaluations carried out by the National Council show mixed results. However, the latest most sophisticated study from 2015 of two city center areas in Stockholm with comparatively high rates of crimes against the person indicated no effects on criminality. Furthermore the contribution to clear-ups from CCTV footage was very modest. Interestingly, most of the interviewed people in Stockholm were not aware that the areas were surveilled by CCTV cameras, but still believed CCTV was effective.

An international systematic review according to the Campbell Collaboration standard by Welsh and Farrington (2008) indicates that CCTV has a modest but significant effect on crime.

However, the overall conclusion rests on evaluation studies from car parks which showed significant decrease in car crimes. But there were no significant effects from city and town centers, and from public housing.

In addition Johannes accounted for a systematic review founded on the EMMIE framework. This framework helps to establish whether and how effective a certain measure is; in this case CCTV schemes as to their Efficiency in preventing crime, the mechanism supposed to give rise to the effects (Mechanism), in which contexts they work best (Moderator), the CCTV systems used (Implementation), and their costs (Economy). Again, the model makes clear a number of issues but does not favor CCTV as an effective general crime control tool.

Given the weak overall result, Johannes questioned the Swedish police attempt to implement CCTV on a national basis without creating standard procedures on how to run the schemes, and more importantly, without any efforts to evaluate CCTV's assumed crime preventive effects. The Swedish police state that they adhere to the Evidence Based Policing paradigm, but totally neglect it in this case. The large investment could very well be a waste of money.

Johannes ended his talk by suggesting that the implementation of CCTV is just one of many measures that haven't been founded on evidence. Based on societal costs of such technology, he calls for the need of a systematic cost-benefit analysis of CCTV on its effectiveness for crime control.

Johannes Knutsson has conducted studies with and for the police for 40 years in Sweden and Norway. Johannes is Professor Emeritus of Police Research at the Norwegian Police University College.



Photo: Vania Ceccato

From Dagens Nyheter, June 9

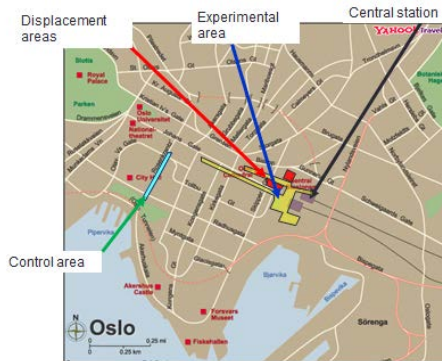


Police set high hopes to new super-cameras

All other measures haven't worked. 55 advanced cameras on house-walls have filmed everything that have occurred in three disadvantaged centre areas during four weeks. However, the new legislation, putting on restrictions, is a threat. But we will appeal.

- Obviously, the police believe strongly in effectiveness of CCTV.
- What can we learn from research evidence?

Slides from Johannes Knutsson's presentation



Swedish evaluations of CCTV

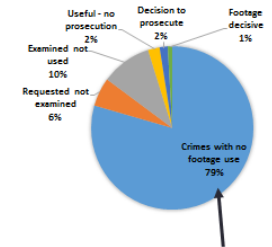
- 6 reports from the Swedish National Council for Crime prevention
 - 1 meta review 2007 (Welsh and Farrington, a Campbell Collaboration review).
 - 3 evaluation studies
 - 2003 – Malmö. Somewhat mixed results
 - 2009 – Landskrona no-effect
 - 2015 – Stockholm no-effect (preliminary findings 2013 and 2014)

Results in short

- Crime decreased in surveilled areas, but also in the 7 control areas. Interpretation – part of general crime drop. Conclusion: no effect.
 - NB - on average only 3 target type crimes reported per place and weekend night.
- Most people did not know the areas were surveilled but believed CCTV was effective.
- Police positive to CCTV.
- And clear-ups?

Contribution to clear-ups

n=560 crimes reported during monitored time in CCTV surveilled areas.



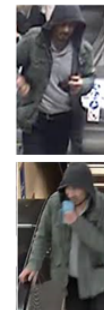
There are (must be) cleared-up crimes among these.

Systematic review via EMMIE concept covering 41 evaluation studies

- E = Effects found.
- M = Mechanisms identified (how a measure works).
- M = Moderators identified (conditions needed to activate mechanisms).
- I = Implementation (what was found to be needed to put the measure in place).
- E = Economy (costs and returns on costs of the measure).

See <http://whatworks.college.police.uk/toolkit>

CCTV – an easy sell?



Reinforced by recent events many believe in CCTV's efficiency.

- The Stockholm April 17 terror attack where footage almost immediately was available and terrorist soon afterward was apprehended.
- Sexual assaults during rock festivals – big issue last year, fewer reported crimes this year.
- These instances are used by the police.
- Security industry lobbying.
- My worry – another 25 mill. SEK down the drain?

Body worn cameras as surveillance tool

Elizabeth Groff

A series of highly-publicized incidents have sparked controversy over police use of force. Police body worn cameras have been seen as a solution to the use of force. This talk describes findings from the initial implementation of body worn cameras in a police department in a high-crime district in Philadelphia, US.

Drs. Groff and Wood's study explores how the police officers themselves experience body-worn cameras and reveals several changes in police officer attitudes after wearing cameras.

The results show, that the acceptance of body-worn cameras, increases after wearing them, especially among non-white officers. Additionally, the findings show that officers think body-worn cameras allow a greater capacity to document police work. The cameras are more seen as "tools" than "monitoring devices".

One reason for this shift in attitude is that camera footage often clears officers in case of false or exaggerated complaints. The body-worn cameras also affect the officers' behavior and discretion. The study shows a perceived impact on professionalism: A large percentage of the police officers were more cautious in making decisions when wearing the body worn cameras.

The study, however, shows that body worn cameras are not a panacea for improving police and community relations. Limitations of the study are, that the findings may not be generalizable to other US cities.

Elizabeth Groff is is an Associate Professor in the Department of Criminal Justice at Temple University, Philadelphia, PA, USA. Her research has over the last ten years been on developing evidence to improve police practice.



Photo: Vania Ceccato

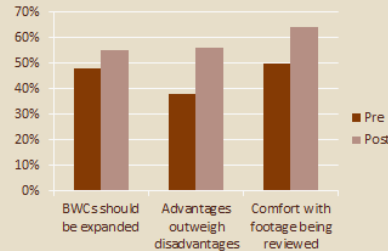
Slides from Elizabeth Groff's presentation

Cameras as surveillance tool

- How do cameras change officer's approach to policing?
- How do cameras change police-citizen interactions?



Rise in acceptance



Significantly more nonwhite officers support cameras

Implications for practice

- Widen scope and formalization of camera training
 - Not just technical but also technique
 - Proactive uses
- Control the narrative about cameras
 - Tell stories about benefits and accountability
- Improve monitoring and provide feedback
 - Put systems into place to insure compliance (no 'cherry-picking')
 - Videos become part of feedback loop to improve police practice



Study design and data

| Qualitative data | Quantitative data |
|--|---|
| <p>2 Pre-pilot focus groups:</p> <ul style="list-style-type: none"> Establish general issues related to usability & acceptance Refine questions & measures on surveys <p>3 Post-pilot focus groups:</p> <ul style="list-style-type: none"> Experiences of wearing cameras Perceptions of effects on the nature of police work <p>1 Post-1 year focus group:</p> <ul style="list-style-type: none"> Experiences and effects on officer behavior | <p>Survey instrument:</p> <ul style="list-style-type: none"> Pre-deployment survey of officer attitudes & perceptions (n=84, 58%) Post-deployment survey of officer attitudes & perceptions (n=107, 74%) |

QUAL → QUAN → QUAL

Greater capacity to document police work:
From 'monitor' to 'tool'

- Cameras as protective of officers
 - In cases of false or exaggerated complaints
 - Concerns with increased IAB investigations allayed
- Create documentaries of arrests
- Gather video and photographic evidence at crime scenes
- Capture conduct of unlawful protesters
- Record standard-setting with citizens
- Enhance quality of written reports



Implications for research

- Use videos as data source to document police-citizen interactions
- Develop more nuanced survey questions to measure police discretion
- Explore new technology for automated processing of video
- Measure district variation in BWCs' effects on police-community relations



Real time sousveillance: citizens' live broadcasting of conflicts in public space

Lucas Melgaço

Lucas talk analyzed the live broadcasting with mobile phones of citizen's experiences of conflicts in public spaces.

As surveillance is normally seen as a top-down activity, grassroot monitoring or sousveillance can be seen as a bottom-up counter-surveillance.

Today, citizens can watch and surveil their peers and also their watchers or guardians. Live-streaming technology, such as Periscope, SnapChat and Facebook Live allows mobile films to be broadcast in real time. Dr. Melgaco discusses the use of live-streaming apps during street demonstrations in Brazil and Belgium.

The study uses participatory observation in the field IRL but also participatory observation of the live streaming on Periscope.

The study discusses in which respect live-streaming can be seen not only as sousveillance, but also as a form of synopticism. The term "synopticon" is seen as a direct counterpart to the panopticon.

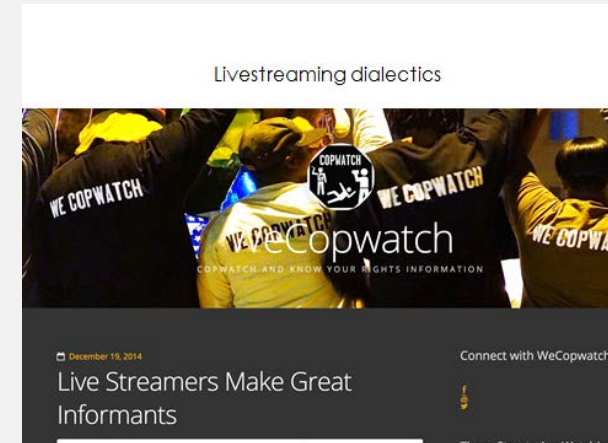
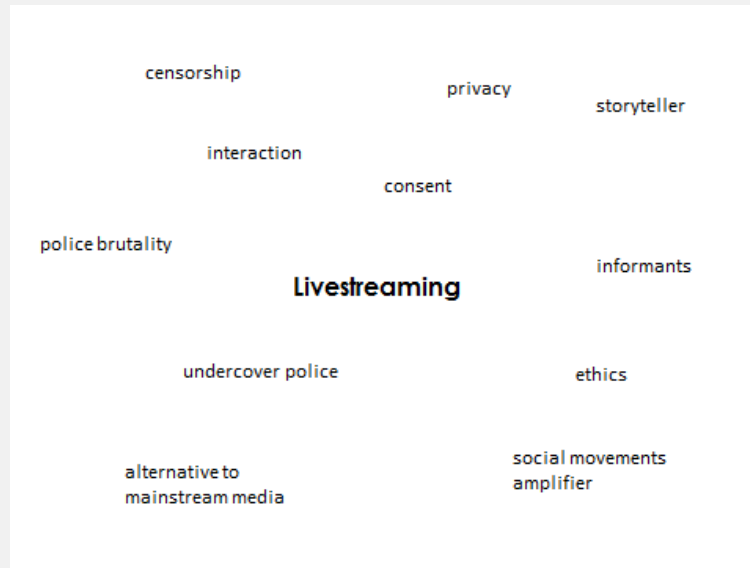
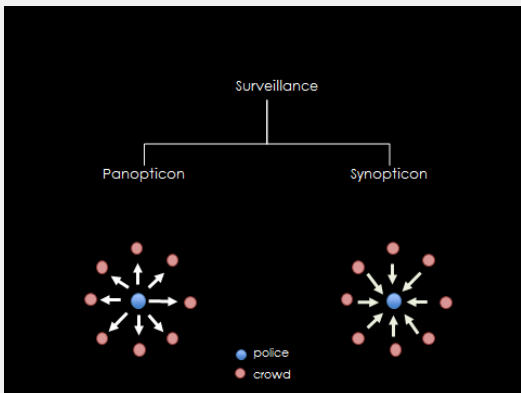
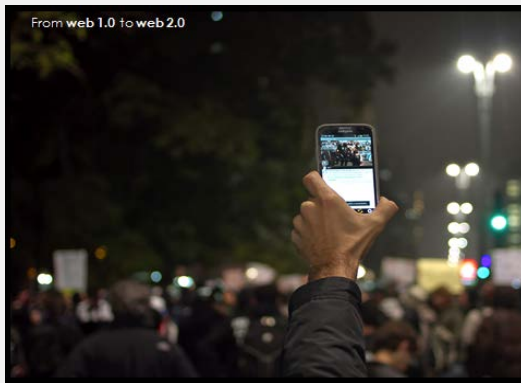
Apart from "the few seeing many" (panopticism), web 2.0 technology and the mass media have now enabled an environment where "the many see the few" (synopticism). Prof Melgaco also raises questions about issues of privacy and consent related to live-streaming. The persons being filmed – and live-streamed – have not always given their consent upon being recorded and their integrity is therefore put at risk.

Lucas Melgaço is a Professor at the Department of Criminology, Vrije Universiteit Brussel, Belgium. His main scientific interests are in the domains of surveillance, public order, social movements and protests and policing.



Photo: Bo Grönlund

Slides from Lucas Melgaço's presentation



"Good" Livestream Tactics

- Stand hundreds of feet away from the group so the low quality recording doesn't pick up conversations or peoples' identity.
- Don't film peoples' identity without their consent.
- Don't narrate intentions, tactics, locations, or destinations.
- Wear a bright shirt that says "Live Streamer" or "Informant."

More "Real Good" Livestream Tactics

- Live Stream an event, panel, or discussion where all parties consent.
- Live Stream a demo or action where all parties involved consent.
- Live Stream your interactions when being stopped, questioned, or harassed by law enforcement. (maybe put your channel on private)

Be safe out there, and make it safer for the masses by considering them when you point a camera at them.

- Questions :
- Should livestreaming be regulated?
 - Should any citizen be allowed to livestream or should it be exclusive to credentialed journalists?
 - Should citizens be always allowed to livestream police officers on duty?
 - Will police officers act differently when knowing they can be filmed and streamed live?
 - What if footage from police body cams was also livestreamed?
 - What kind of events should be streamed live and which ones should not?
 - Is the future of livestreaming more utopic or distopic?

Mapping the movement of active guardians in time and place

Reka Solymosi

'Crowdsourcing', a portmanteau of 'crowd' and 'outsourcing', represents a means for tapping into group intelligence on large scales. Crowdsourced data are produced by large numbers of individuals contributing content to a central repository, where Wikipedia, the crowdsourced encyclopedia, is the perhaps most renowned example. Crowdsourcing has also caught the attention of researchers since it could be viewed as a way of outsourcing the data gathering processes to the public.

Solymosi presented a way of utilizing crowdsourcing data to examine whether the presence of capable guardians, as suggested by the Routine Activity Theory, has an inhibiting effect on local burglary rates.

She gathered crowdsourcing data on the presence of capable guardians by harvesting the website 'Fix my street' where citizens are able to report different forms of environmental disorder and other complaints to applicable governmental actors. Solymosi hypothesized that people reporting their concerns onto the website were 'active capable guardians', and in neighborhoods with active capable guardians the burglary rates were expected to be lower.

By examining more than 55,000 entries on the website Solymosi identified two major results. First of all, the majority of the reported incidents were made by a small amount of reporters which were termed 'super contributors' who also functioned locally, i.e. reporting problems foremost within a delimited area. Secondly, the presence of Fix My Street-active capable guardians did not prove to have a preventive effect on local burglary rates.

Against this background Solymosi concluded how crowdsourced data on the movement of capable guardians should be considered with caution, but the phenomenon is in need of further research before a definite answer.

The final discussion was in regards to the inherent bias in these data regarding who the contributors were, in particular the representation of elderly citizens as active capable guardians filtered through their use of technology.

Reka Solymosi is a lecturer at the University of Manchester, UK. Her PhD thesis entitled "Mapping everyday experiences with crime and fear using crowd-sourcing data" is from UCL in Crime Science and Civil Engineering.



Photo: Vania Ceccato



The premise

Crowdsourced data (through web/apps) can represent the presence of people actively monitoring their environments, potentially acting as capable intervening guardians.



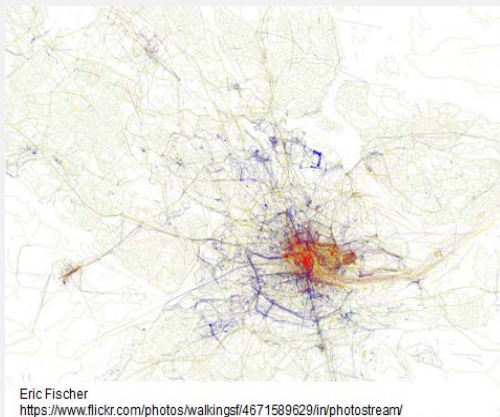
What are people doing when they are generating these data?



"...over flowing rubbish, street drinkers, litter in the street and rats."



Harnessing information and skills from large crowds into one collaborative project.




Conclusions

- Can crowdsourced environment monitoring data represent movement of active guardians? – Maybe...
- Biases to be considered
- Repeat study with more granular crime data
- In-depth exploration of super-guardian behaviour

The use of ICT to create a “beehive” for data collection and information sharing in policing

Stefan Holgersson

The devastating events taking place during the Gothenburg EU-summit in 2001, including violent clashes between police and demonstrators, gave birth to the idea of a special task force within the Swedish police agency. The dialogue police emerged as a tactic to soothe the atmosphere during demonstrations and manifestations and to facilitate communication between the police and the public during fierce situations.

Against this background, Holgersson presented a collaboration between the (dialogue) police and voluntary citizens, where the latter could be viewed as capable guardians, when handling demonstrations and manifestations. By linking the police and voluntary citizens through a vast mobile phone text-chain, the beehive, information may swiftly be spread among administrative and intervening personnel during demonstrations.

Instead of having information traveling the conventional way (i.e. call for service, command center, officer in charge, task group, intervention) the beehive could be viewed as an alternative approach to quickly exchange information during these extraordinary situations and rapidly mobilize personnel to where they are needed most, an important feature since time and punctuality is essential during these circumstances.

Although Holgersson reported evaluations of the method as positive the initiative faded out. The following discussion was in regards to who the volunteers were, why the initiative faded and the (in)sensitivity of the police agency to listen to research.

Stefan Holgersson has conducted research over 20 years about the Swedish police and has been a police officer for 25 years. He is an Associate Professor at Linköping University, Linköping, Sweden.



Photo: Vania Ceccato

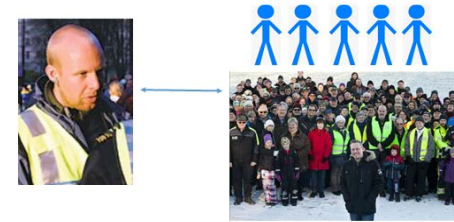
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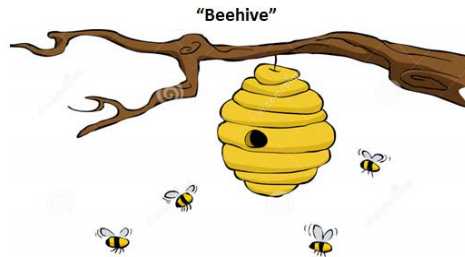
Data collection and information sharing with volunteers



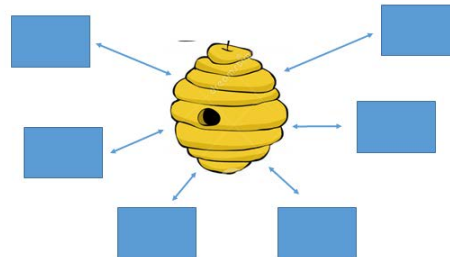
Beehive



Data collection, information sharing and cooperation



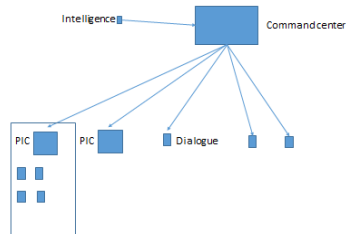
Beehive



Beehive



Background



Data collection and information sharing with volunteers



Evaluation



Take away messages

Agneta Mallén

Agneta describes the talks of the seminar as examples of seven ongoing trends and discourses in contemporary surveillance studies:

First, a growing privatization of surveillance: Surveillance today can be carried out by apps, mobile phone cameras and body worn cameras. This technology is promoted by the private security industry and businesses. The privatization of surveillance through apps and cameras can also be seen as private policing, where control and surveillance is transferred from state agencies to the citizens themselves.

Second, an increase in the responsabilisation of the individual: The citizens themselves are made responsible to monitor and surveil with the help of apps and cameras.

Third, a growing lack of integrity, as both cameras in the streets and body worn, and mobile phone cameras are at times perceived as invasive. The individuals who are monitored by these cameras lack control of the filmed material. Also, mobile phone cameras enable labelling of the persons who are filmed: when uploaded on the Web, mobile phone films stir up stigmatization and even virtual punishment of the persons shown in the clips.

Fourth, a lack of context and truth. When using CCTV, body worn cameras and mobile phone cameras as tools for guardians, it is of the utmost importance to emphasize that the film

clips thus created lack of context and only show a narrow slice of the truth, not the whole truth. This is especially important when such film clips are used as evidence material in courts.

Consequently, fifth, the importance of triangulation when using film material as evidence: By combining several kinds of film material, the picture of the filmed series of events becomes more multi-faceted and nuanced than if only using one, or one kind of, camera film showing a series of events.

Sixth, in order to study surveillance and sousveillance, research by the use of ethnographic methods are successful: these methods range from interviews to observations in the real world to ethnographic studies of the internet, where netnography can be used in analyzing e.g. Google Maps, Facebook, Periscope, and YouTube.

Finally, seventh, the importance of successful collaboration between municipalities, organizations, state agencies, the police and researchers at universities in order to study and implement new forms of contemporary surveillance and control.

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Agneta Mallén has studied sousveillance and citizen journalism since 2007 using analyses of YouTube mobile film clips and comments to clips. She is a senior lecturer at the Department of Sociology at Lund University, Sweden.



Photo: Vania Ceccato

Take away messages

Vânia Ceccato

In this seminar ‘social control’ was designedly defined in a broad way; capturing the process of individual monitoring, natural and electronic surveillance, sousveillance (control from below), active guardianship up to acts of intervention for the purposes of crime prevention and control. It may have involved a simply pair of eyes but also complex set of technologies of monitoring and capturing data, sounds and image as well as their analysis and diffusion through virtual means.

The talks clearly showed signs that the age of digital surveillance impose a number of new empirical, methodological and ethical challenges. For instance, regardless technology used, we still need ‘individuals’ to engage in a particular action to prevent a crime. Researchers often assume that being available is crucial for intervention, but what happens when people start using their mobile Apps to call the police to rescue a potential crime victim miles away? Does this action classify as ‘guardianship’? Can we make virtual bystanders accountable for an event?

Regardless if it is the ‘old’ CCTV cameras or body worn ones, the impact of these technologies on crime prevention is still an open question. Evidence is mixed or inconclusive. Research has not yet shown the desired effect on individuals’ activities, including on overall offending.

Speakers all agreed that these technologies offer new potentialities but also new risks. Issues of false

call for services, false accusation or the risk of creating an online activity that enhances more insecurity in a particular group/area - were mentioned in the talks as examples of the undesired practices.

The talks also indicated that the current body of criminological theories is put at test since the exercises of social control are being redefined by rapid technological developments. This aspect was noticed in many talks but 3 in particular (use of body worn cameras by police officers, the live broadcasting with mobile phones of citizen’s experiences of conflicts in public spaces and the use of data from Apps/internet sites about events of public disorder). Speakers indicated that we need to know more about the mechanisms linking new exercises of social control, use of public spaces and safety. Any effort must be focused on the specific types of problems as well their variability over time and space. Therefore, ‘real time data’ captured by these sensors are ‘the perfect fit’ for investigation at detail level. As speakers illustrated in this seminar, they are already being used to support safety interventions.

In summary, instead of looking for ‘definitive answers’ to our questions, the seminar offered a platform of discussion with a variety of perspectives about a fairly uncharted issue. Scholars offered their own take on the subject, that combined with practical knowledge from presenters, made the seminar a success. Thanks to all presenters for such a great seminar!

Vania Ceccato is coordinator of *Safeplaces network* (KTH) .



Photo: Asifa Iqbal



Photo: Bo Grönlund

*The aim of the **Safeplaces network** is to improve the knowledge base on situational crime prevention among local actors in Sweden, which can ultimately work towards the creation of safer environments. This aim is achieved by among other things by organising international arenas of knowledge in Sweden with links to international research. The KTH 2017s international seminar contributed to this goal by bringing together international scholars from different disciplines and countries to discuss the nature of social control in the digital era and the potential impacts they have on crime and crime prevention.*

Booklet contributors



*Agneta Mallén
Lund University, Sweden*



*Asifa Iqbal
KTH Royal Institute of Technology, Sweden*



*Karl Kronkvist
Malmö University, Sweden*



*Sofie Kirt Strandbygaard
DTU Technical University, Denmark*

Booklet editor & seminar organiser



*Vânia Ceccato
KTH Royal Institute of Technology, Sweden*



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Contact: info@sakraplatser.abe.kth.se



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