CUPP

Critical Understanding of Predictive Policing

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NordForsk

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Aim

- To investigate how institutional and social values, digital affordances, and organizational politics are conceived and embedded in predictive policing

- To explore how citizens, police officers and developers of digital police infrastructure in Denmark, Estonia, Latvia, Norway, Sweden and the UK experience and practice these technologies.

Case studies of digital and datafied law enforcement tools

DENMARK	General crime	❏ POL-INTEL - Intelligence-led policing platform
NORWAY	Youth crime/gangs	❏ Risk assessment tools
LATVIA	Road traffic safety	❏ Future Intelligent Transport Systems ❏ Unmarked police bus with a 360-degree camera, drones ❏ Police body-worn cameras ❏ Smartphone apps allowing citizens to report crimes and incidents
ESTONIA	Data instead of humans on the move	❏ Genetic engineering (CRISPR-Cas9) ❏ E-residency and digital migration ❏ Border control & smart city
SWEDEN	Enhanced policing power for security guards	❏ Gothenburg's Brunnsparken
UNITED KINGDOM	Urban public space policing	❏ London's St Pancras

Methods: recent historiography + ethnographic investigation + interventionist analysis

Data collection

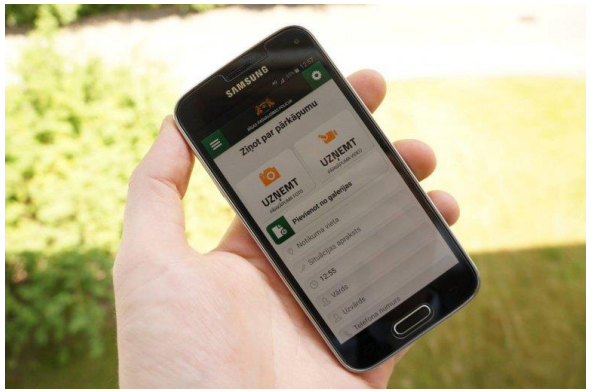
Recent Historiography	Ethnographic investigation	Interventionist analysis
Recent historiography on how the concepts of policing and information technology have been intertwined (and disconnected) in political and public discourse since the 1960s, b) tracing the specific trajectories of the technologies which are in focus in each country, including public documents, popular articles on policing and digitalization, archival data collection, e.g. on political strategies, hearing materials, and public procurement processes around police data-driven technologies.	Fieldwork and interviews to make inquiries into police officers' daily practices at each constituency. We use established ethnographic methods combined with experimental anthropological protocols to map how data-driven policing is experienced, practiced, and envisioned.	Establish collaborations with citizens active in digital democracy initiatives. We will also design our own workshops in which citizens and researchers jointly identify issues and develop key questions to tackle those issues (see for example Mühlhoff 2019).

Latvia – controlling road traffic with digital tools

- Future Intelligent Transport Systems
- Unmarked police bus with a 360-degree camera
- Police body-worn cameras
- Smartphone apps allowing citizens to report crimes and incidents

These digital tools:

- involve varying degrees of reliance on systems, data gathering and analytics as a prerequisite for enabling predictive tools
- raise new ethical, legal and social concerns regarding digital surveillance in public spaces



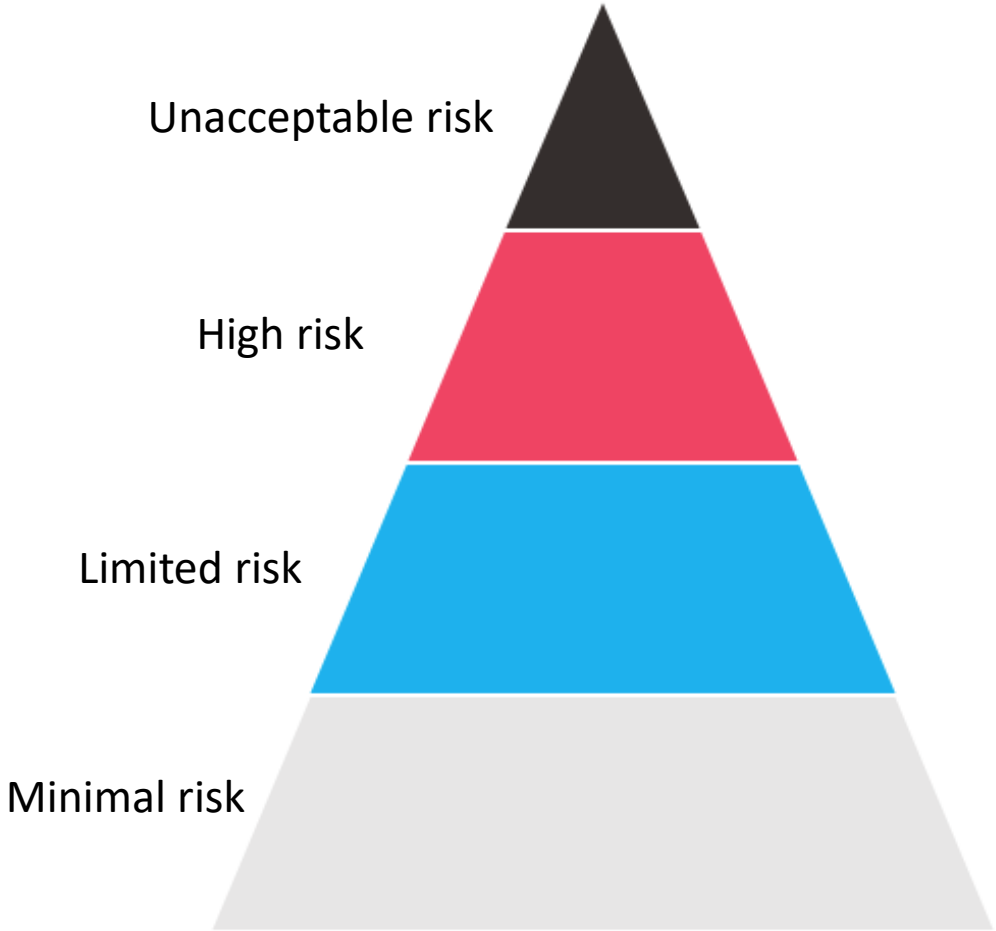
EU AI Regulation proposal and digital surveillance in law enforcement

Risk-based approach

Prohibited AI practices:

- Harmful manipulation of human behaviour
- Exploitation of vulnerabilities
- Social scoring for general purposes done by public authorities

- The use of real-time remote biometric identification systems in publicly accessible spaces for the purpose of law enforcement, unless certain exceptions apply:
  - strictly necessary for specific purposes
  - necessary and proportionate safeguards and conditions
  - prior authorisation, except urgent situations



EU AI Regulation proposal and digital surveillance in law enforcement

High-risk AI systems used in the areas listed in Annex III, including:

- Biometric identification and categorisation of natural persons
- Law enforcement - AI systems used, including:
  - for making individual risk assessments of natural persons in order to assess the risk for offending or reoffending or the risk of potential victims of criminal offences
  - predicting the occurrence or reoccurrence of an actual or potential criminal offence based on profiling of natural persons or assessing the personality traits and characteristics or past criminal behaviour of natural persons and groups

Legal requirements for high-risk systems:

- Risk assessment and mitigation
- High quality of data sets used
- Technical documentation and record-keeping
- Transparency and the provision of information to users
- Human oversight
- Robustness, accuracy and cybersecurity
- Conformity assessment

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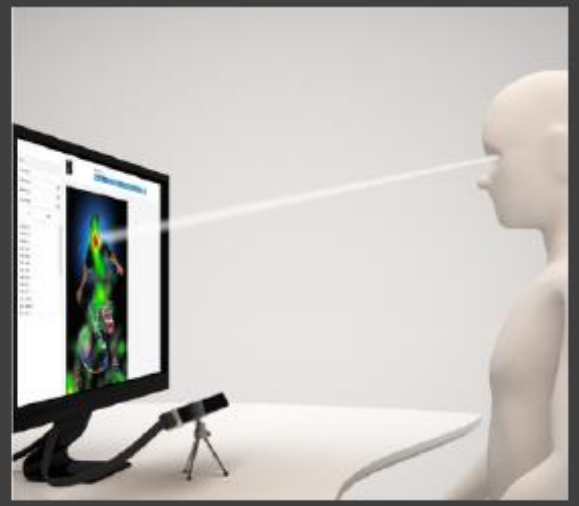


01

EYE-TRACKING

- gets deeper insights into human behavior
-tracks gaze direction

02

EEG/FNIRS

-records the electrical activity of the brain
-brain activity in real-time based on changes in blood oxygenation

Methodology

- **In-depth interviews with experts:**
  - private institutions;
  - non-profit organisations;
  - policy developers, decision-makers.
- **Experimental approach:**
  - data subjects' perceptions, agency;
  - interactions with predictive policing tools;
  - underlying cognitive processes.

Norway: Forecasting future crimes & criminals

- **Focus: P**redictive policing as a tool for reducing uncertainty and risks in the Norwegian police.
- **Case studies:** exploring differences in the use of predictive policing efforts**,** depending on whether data-driven algorithms are integrated in the software program or not. Comparing Denmarks Pol-Intel
- What theories/assumptions are guiding risk assessments tool applied?
- To what degree is data transferred over network without requiring human-to-human interaction and even human to computer interaction, and what does that mean and matter for doing police work?
- Explore how these aspects influence the decision-making processes and discretionary power within the police system and by the individual.
- Unpack: ‘data-driven vs theory-driven

Predictive policing in Norway

1. Strategical and operational intelligence reports: Crime phenomenon's; likelihood for crime to occur in the future. Intelligence-led policing

2. Place-based: Applying theories from environmental criminology
   - Crime differently distributed in time and space; targeting places/hot spots – Software as 'PreCob' in Germany and Switzerland (Leese and Egberg 2020; Patterns and connecting dots (Kaufman et al 2019)
   - In Norway more experimental collaboration academic/police: Police University College phd-project (Skardhamar and Allvin)

3. Person-oriented: Cases applying individual profiling with risk tools: intelligence data, targeting persons identity attributes
   - Identity suitable efforts for preventing youth crime
     High, medium and low risks, what needs compensate risks
   - OPSuper, Trakta, PersonligeTiltaksplaner

- All based on historical data, and uses these to extrapolate from known data to unknown / future events or criminal behavior (anti social behaviour).

Dream and expecta

Data collection (2019-2024)

- 2019: Intelligence to prevent youth crime, gangs and violence in South Oslo, 10 interviews, 8 observations

- 2021-23: Risk assessment tool – risk-need (with Pernille S. Eriksen)
  - Analysis policy documents and 10 interviews with decision-makers and software engineers, 15 interviews with OP Super and other relevant cases/direct observation (CUPP)

- 2021-24: Interviews and observations Algorithm goverance and policing cultures (ALGOPOL, NRC) – with Christin Wathne & Tereza K. Østli
  - in police districts, special units and collaborators, software engineers, decision makers and developers
  - document and analysing data registrers

Digitalisation, policing & urban public space, *Evie Papada and Antonis Vradis*

- FOCUS: understand the impact of the implementation of digital policing technologies on urban public space
- Preemptive policing and surveillance- reshaping the right to the city
- Changing nature of publicness and public space
- Case studies: a) Gothenburg's brunspark square and b) Londons' St Pancras.
  Address relationship between two different types of predictive policing and public space.
- a) Gothenburg's brunspark square: look at the how the logic of preempting shapes new policing strategies of urban public spaces.
- b) Londons' St Pancras: look at the role of still and live facial recognition surveillance and the ways in which those targeted are experiencing

Denmark: POL-INTEL

- POL-INTEL was decided to be set up after the report following the terrorist attack in Copenhagen 2015.
- The program essentially allows access and to, and analysis of, a variety of police databases such as national citizenship database, weapons registry, police case work database, etc.
- Made by Palantir, controversial US company.
- Launched originally as ”predictive policing” and as a ”super weapon” for police and seen as a dystopia by critics. Later on, police refuses the descriptor of ”predictive” and describe it as part of intelligence-led policing, even a mundane ”pretty good Google search” of police files.

- Media coverage and public/policy debate around POL-INTEL and intelligence-led policing.
- Interviews with public servants from the Ministry of Justice and the police will be conducted. Interviews with programmers at Palantir are also planned.
- Interviews with users and leaders in the police who have been part of the procurement and implementation of POL-INTEL. EU officials responsible for the rights to privacy and data protection will also be interviewed and policy documents on security and privacy will be analyzed.
- Ethnographic study of the application of the software (if possible).

Cross-cutting themes

I. Diversity of agents and objects of surveillance

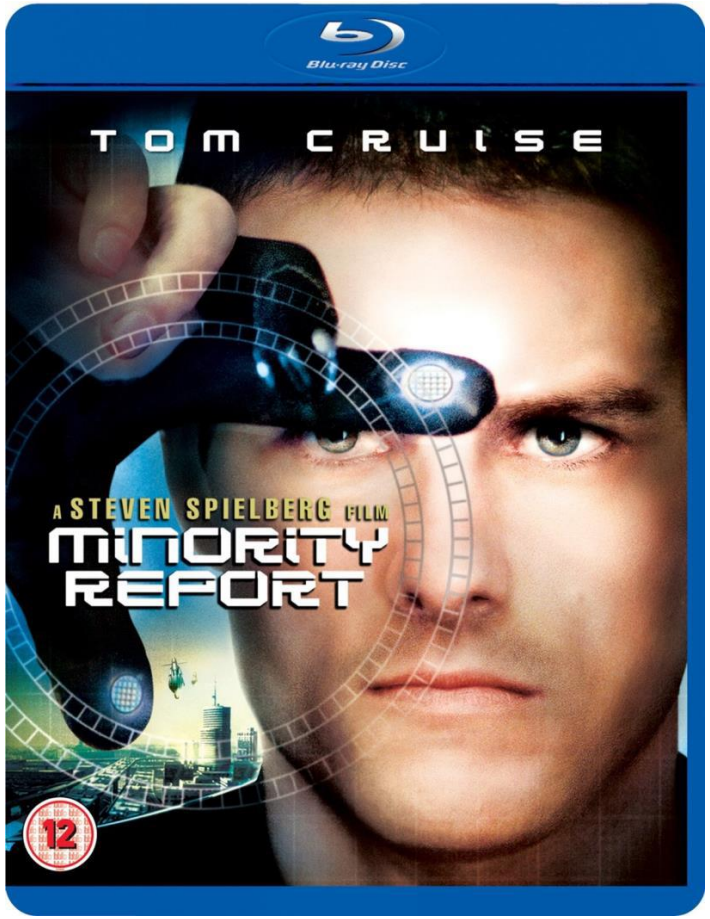
II. Demarcation of spaces of surveillance

III. (Co)production of knowledge

IV. (Re)definition of public and private space

V. Shifting human and non-human agency and patterns of authority

VI. Diversity of agentive experiences and responses to surveillance



Critical Engagement

- Research is needed to understand how transparent and accountable law enforcement institutions and policing innovations come into being in practice.
- Research that will hold the police accountable for the justice of their actions and credibility of their analyses.
- Debate with relevant stakeholders, including police officers, programmers the public.
- Shed light on the social dimensions of policing in the age of big data.
- We question to which extent police data analytics is a rationalizing force with potential to reduce bias, increase efficiency, and improve prediction accuracy or rather the opposite – unintended consequences
- How do fundamental rights, legal requirements and safeguards, e.g. transparency and public oversight, are ensured in the implementation and use of digital policing infrastructures?

Thank you!

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