

Critical Understanding of Predictive Policing

# The Discreet Charm of Prediction: Critical Understandings of the Digitalization of Policing

International conference at the IT University of Copenhagen January 29-30, 2024

Keynote speakers: Simon Egbert, Sarah Brayne

Host and sponsorship:

@CUPPresearch, Nordforsk

IT University of Copenhagen Rued Langgaards Vej 7 2300 Copenhagen S Denmark

# **Explainers**

#### **Conference Organizing Committee**

Anu Masso, Bjarke Friborg, Björn Karlsson, Giorgos Mattes, Helene Oppen Ingebrigtsen Gundhus, Irena Barkane, Konstantinos Floros, Vasilis Galis

#### **Conference Organizing Group**

Cindy Fan, Emma Tidgen Houtved, Fredrik Schjoldan Lindahl, Helga Sofia Nielsen, Liva Stamer Sæbye, Sabine Carlis Hansen, Sofie Olivia Schirmer Lenschau.

All members of the Conference Organizing Group have volunteered and are Master's students in the MSc program in Digital Innovation & Management, at the IT University of Copenhagen.

#### Participants in the CUPP project

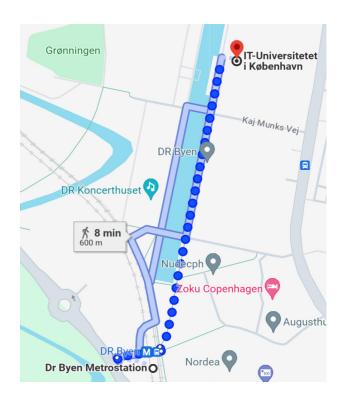
#### **Academic institutions**

IT University of Copenhagen Tallinn University of Technology Baltic Studies Centre University of Latvia University of Oslo Oslo Metropolitan University University of St. Andrews

#### **Communication Partner**

PROSA - Danish Association of IT Professionals

# PRACTICAL INFORMATION



#### Location

IT University of Copenhagen Rued Langgaards Vej 7 2300 Copenhagen S, Denmark

Walking distance from Metro station 'DR Byen': 600 m

#### Lunch

Canteen on site at own expense (both days)



## **FOREWORD**

Welcome to the international conference on predictive policing – hosted by the research project CUPP (Critical Understanding of Predictive Policing), sponsored by NordForsk and taking place at the IT University of Copenhagen. With two conference days, several panels and 10 parallel tracks with almost 40 presentations, we are aiming for multi-faceted and productive conversations. In total, we are expecting up to 200 participants, comprising researchers as well as practitioners and concerned citizens with an interest in the implications of an increasingly digital police.

#### Between the discreet charm of prediction and warnings of dystopia

Over the past 20 years, police organizations and practices across the globe have adopted data-driven tools to predict and prevent crime (Ferguson, 2017; Brayne, 2021). In this conference, we will focus on the digital transformations within the police that have both inspired and engendered new sociotechnical imaginaries that either promise efficiency and security (Schafer, 2007) or stress the potential risks for mass surveillance and algorithmic bias (Egbert, 2019; Harcourt, 2007).

The discreet charm of prediction, in terms of increased efficiency, reduced fiscal burdens, improved accuracy of decision-making, streamlined data management, and lower crime rates, has thus been met with skepticism, significant critique, and even warnings of dystopia. The global rise of predictive policing methods is an example of the charm so far, yet its more recent fall is meanwhile indicative of the skepticism with which it has been met.

The overall goal of this conference is to better understand what law enforcement and predictive policing have become today, with the ongoing digital transformation and platformization of key functions of the police organization.

Best wishes,
The CUPP Conference Organizing Committee

	Conference	Day 1   Monday, January 29		
09:00	Registratio	n with Coffee and Tea	ITU Atrium	
09:45	Parallel Ses			
	Panel 1A	Community policing in times of digitalized policing	Aud4 – 4A60, 4th floor	
	Session 1	Historical Grounds and Evolution of Predictive Policing	ScrollBar,	
	1.1	Predictive policing in Sweden: Unveiling complexities and historical perspectives	ground floor	
	1.2	Surveillance in Transit: A Chronology of Power, Complicity, and Policing in the Indian Ocean World, c. 1850-Present		
	1.3	Visions of techno-policing at the dawn of the digital age		
	1.4	What's old is new again: Revisiting historical ethical dilemmas of predictive approaches to public safety		
	Session 2	Evolving State-Citizen Relations with Predictive Policing	3A52,	
	2.1	Dreams of increased efficiency and security – Hacking as state surveillance	3rd floor	
	2.2	Welfare administration as police? Digitalization and control of citizens		
	2.3	Perceived Legitimacy of Predictive Policing: Do Political Regimes Matter?		
	2.4	The patchwork of Surveillance: Looking at the oligopticon of inner border control		
11:15	Break with	Coffee and Tea	Atrium	
11:30	Parallel Sessions B			
	Panel 1B	How does algorithmic policing affect the relationship between prevention and repression?	Aud4 – 4A60, 4th floor	
	Session 3	Surveillance and citizens	ScrollBar,	
	3.1	Saving face? Recent developments in public space surveillance in the UK	ground floor	
	3.2	Traffic, surveillance and distributed agency: the ambiguities of mundane technologies		
	3.3	Citizen App: The Digitization of Crime and Lateral Surveillance in New York City		
	3.4	Participatory victimization? Tensions in security technologies directed to citizens		
	Session 4	Predictive Policing as a Knowledge-Making Process	3A52,	
	4.1	Making Information Matter: Predictive policing and associative logics	3rd floor	
	4.2	Charting the Knowledge Networks of Policing in Norway: A Citation Network Analysis		
	4.3	Behind closed sources: 'Clandestine openness' of OSINT in law enforcement investigations during an era of openness		
	4.4	Machineries of knowledge construction: Exploring the epistemic agency of digital systems in policing		
13:00	Lunch (owr	n expense)	Canteen on site	
14:00	Keynote speech: Sarah Brayne       Aud1,         Research as Surveillance: Navigating Data Dilemmas in the Study of Predictive Policing       ground for a ground fo		Aud1, ground floor	
15:30	Break with	Coffee and Tea	Atrium	
15:45	Panel Discussion: Silicon Valley vs. the EU: Palantir in Denmark       Aud1,         ground floor       ground floor			

		Day 2   Tuesday, January 30	
8:45	Registratio	n with Coffee and Tea	ITU Atrium
09:15	Parallel Sessions C		
	Session 5	Prediction and Police Power	ScrollBar,
	5.1	Prediction, Politics and Police Power in the Digital Era – The Case of POL-INTEL	ground floor
	5.2	More than software vendors and analysts. Instances of Palantir's presence in Europe	_
	5.3	Algorithmically generated suspicion: Introducing intelligence-led and predictive policing in the Danish National Police	_
	5.4	Anti-Trafficking Predictive Policing: Examining the Impacts of Datafication in North America	
	Session 6	Constructing Social and Structural Inequalities through Predictive	3A12-14,
	6.1	Forecasting youth crime – From personal archives to intelligence sharing	3rd floor
	6.2	Pre-crime and punishment: the expansion of punishment through predictive policing	_
	6.3	Anticipating crime: dataification, standardization and visibility	
	6.4	From Myth-Making to Quiet Dereliction: An Overview of Predictive Policing in France	
	Session 7	Al in Policing: Challenges and Future Perspectives	Aud4-4A60,
	7.1	From Police Investigation to Court Verdict: Mass Video Surveillance and AI for Criminal Justice Purposes	4th floor
	7.2	Potential harms towards the right to a fair trial and the right to privacy	_
		by the law enforcement use of AI to handle electronic evidence and the impact of the e-Evidence Regulation	
	7.3	Predictive policing in EU law enforcement policies	_
	7.4	(Un)predictable futures of policing: A social transformation approach	
:45	Break with Coffee and Tea		Atrium
00	Panel discussion: Engaging civil society: From the EU AI act to counter-surveillance practices		
:30	Lunch (own expense)		
:30	Parallel Ses	sions D	
	Session 8	Emerging Trends in Digital Policing	3A12-14,
	8.1	DNA as forensic evidence and a commodity: The role of consumer genomics	3rd floor –
	8.2	Scientizing Police Work: Biometric data practices and the creation of anatomic and genomic 'body types'	-
	8.3	New Risks and Old Forewarnings? The Swedish case of logics and risks in biometric interoperability	
	Session 9	Ethical and Legal Considerations in Predictive Policing	ScrollBar
	9.1	The Ethics of Predictive Policing	- oEo1
	9.2	The Role of the EU Artificial Intelligence Act in Addressing the Fundamental Rights Risks of Digital Surveillance and Predictive Policing	_
	9.3	Legal challenges of LEA deployment of AI to predict crime	_
	9.4	Digitizing caste: Criminal databases and policing in India	_
	Session 10	Shifts in Organisational Culture and Police Work	3A52,
	10.1	Forensic Reconstruction and the Digitalization of Evidence Management	3rd floor
	10.2	Resisting digital policing practices: A participatory approach	_
	10.3	Choosing Predictive Communications in the Dutch National Police	_
	10.4	Predictive Policing: Challenges from South America	_
:00	Break with	Coffee and Tea	Atrium

# **Panels**

Title	Panel 1A. Community policing in times of digitalized policing Monday 29th, 09:45-11:15
Organizer	Simon Egbert & Elena Esposito – Bielefeld Germany (Room: Aud4 – 4A60, 4th floor)
Commentators	Commentator 1: Jan Terpstra, Radboud University – Netherlands Commentator 2: Sarah Brayne, University of Texas at Austin – USA Commentator 3: Mareile Kaufmann, University of Oslo – Norway
Keywords	Digital policing, predictive policing, community policing
Description	Police organizations are increasingly relying on data and algorithms. Is digitalized policing opposed to community policing, as suggested by the debate on "abstract police" (Terpstra et al. 2019), or can different outcomes be observed? To what extent can a police force that is more focused on efficiency and cost reduction afford community policing? Is it willing to do it?

Title	Panel 1B: How does algorithmic policing affect the relationship between prevention and repression? Monday 29th, 11.30-13.00)
Organizer	Elena Esposito & Simon Egbert – Bielefeld Germany (Room: Aud4 – 4A60, 4th floor)
Commentators	Commentator 1: Helene I.O. Gundhus, University of Oslo – Norway Commentator 2: Vasilis Galis, IT University Copenhagen – Denmark Commentator 3: Lauren Waardenburg, ESSEC Business School – France
Keywords	Digital policing, prevention, repression, precision, organization
Description	Does the use of algorithms in policing make crime prevention actions by the police more precise? What does it mean for the relationship between prevention and repression? We want to explore the organizational effects connected with the algorithmization of policing. Do street officers get more or less powerful? Do internal hierarchies change, for example in favor of crime analysts?



Title	Silicon Valley vs. the EU: Palantir in Denmark Monday 29th, 15.45-17.15
Organizer	PROSA (Room: Aud1 – ground floor)
Commentators	Commentator 1: Vasilis Galis, IT University – Copenhagen Commentator 2: Anja Møller Pedersen – Danish Institute for Human Rights (DIHR) Commentator 3: Sarah Brayne, University of Texas at Austin – USA
Keywords	Big data, digital policing, data privacy, Silicon Valley, GDPR
Description	Palantir is a data analytics company founded by alt-right darling and Silicon Valley mogul, Peter Thiel. But what exactly does Palantir do? Beyond the 'black box' this panel will dive into Palantir's software capability, what it is used for in Denmark, and focus on the implications of global tech making its way past EU and Danish data protection laws.

Title	Engaging civil society: From the EU AI act to counter-surveillance practices Tuesday, January 30, 11-12.30
Organizer	PROSA (Room: 3A12-14 — 3rd floor)
Commentators	Commentator 1: Anja Møller Pedersen – Danish Institute for Human Rights (DIHR) Commentator 2: Bjarke Friborg, CUPP and PROSA – Danish Association of IT Professionals Commentator 3: Yannis Efthymiou – Yannis Efthymiou, Open Lab (GR), Tampere (FI)
Keywords	Action research, participatory action research, counter-surveillance
Description	It is not only researchers that ask critical questions and perform rigorous scrutiny. NGOs, advocacy associations and community groups often combine activism with thorough investigations while making their insights available in an empowerment perspective. Based on relevant cases this panel will explore where and in which ways researchers and practitioners can engage more fruitfully.



# Sessions

Session 1 **Historical Grounds and Evolution of Predictive Policing** 

Monday 29th, 09:45-11:15

Chair: Antonis Vradis (Room: ScrollBar – ground floor)

Title 1.1

## **Predictive policing in Sweden: Unveiling complexities and historical perspectives**

(Mattes – St. Andrews UK)

Predictive policing, digitalisation, STATUS, Sweden, state, power Keywords

Bio Dr Giorgos Mattes is a Research Fellow at the University of St Andrews (SGSD) and part of the CUPP project. He is interested in STS approaches of policing, how data-driven technologies are reshaping urban spaces, the strategies implemented by law enforcement agencies, and the implications for urban governance and citizens' rights.

The transformation of law enforcement through digitalization, exemplified by Sweden's police STATUS system and marked by the incorporation of data-driven policing tools, including predictive analytics is the central focus this paper. These technologies have been presented as objective and impartial, fundamentally reshaping the landscape of police operations, however, it is imperative to subject predictive policing to critical scrutiny. This presentation endeavors to illuminate the often-overlooked facets of predictive policing, exposing the subtle variables influencing its outcomes and consequences.

An essential aspect of this examination is a critical appraisal of prediction as a phenomenon intertwined with its context and co-created. Using a Swedish case study, this presentation delves into the intricate dimensions of prediction within the realm of law enforcement. Its primary objective is to scrutinize the extent to which technological systems and data reliance create a foundation for enhanced surveillance capabilities. Emphasizing that predictions are not solely algorithmic but are also shaped by human interpretation and contextual variables, this research navigates the complexities of how predictions are formulated, considering the interplay between technological frameworks, data sources, and human decision-making.

In the pursuit of this understanding, it becomes apparent that the police's data collection efforts serve to reconstruct information and establish regimes of truth that generate social knowledge, thereby reinforcing and expanding state power and control. By unveiling the less conspicuous aspects of predictive policing, this presentation aims to cultivate a more nuanced and comprehensive critical perspective on the subject.

**Abstract** 

Session 1 Historical Grounds and Evolution of Predictive Policing

Monday 29th, 09:45-11:15

Chair: Antonis Vradis (Room: ScrollBar – ground floor)

Title 1.2

## Surveillance in Transit: A Chronology of Power, Complicity, and Policing in the Indian Ocean World, c. 1850-Present

(Dharmaraj – Cambridge UK)

Keywords Biometric surveillance, Indian Ocean World, facial recognition technology, eugenics

**Nikhil Dharmaraj** is an emerging academic and creative interested in situating "Al" technologies within contemporary structures of surveillance, power, and violence. Currently, Nikhil is MPhil candidate in the Ethics of Al, Data, and Algorithms at the University of Cambridge (dissertation project above) and an alum of Harvard University in Computer Science and History & Literature. Learning from the deep wisdom of marginalized communities, Nikhil's work grapples with what it means to build collective power against sociotechnical systems while foregrounding complicity as a primary ethical obligation.

Abstract

Bio

Post-colonial theorists have long highlighted the intricate cultural, scientific, and political linkages between South Asia and East Africa by way of Indian Ocean trade routes. Meanwhile, (historically Anglophone-dominated) Surveillance Studies has recently begun to foreground coloniality as an important metric in studying the digital world. However, little scholarship has specifically studied the question of surveillance in transit across the Indian Ocean World – the concomitant emergence of race/caste-scientific analog biometric technologies vis-a-vis the intermingling of settler-colonial, brahminical, and anti-Black hierarchies across South Asia and Sub-Saharan Africa.

In this project, I tease out a chronology of labor, power, complicity, and eugenics in transit across these regions, which have produced technologies ranging from the analog fingerprint and kipande wooden identification card to the modern-day facial recognition algorithm in CCTV-powered smart cities like Cape Town, Nairobi, New Delhi, and Hyderabad today. In particular, I wish to attend to the comprador, often-exploitative role of South Asian migrants in East Africa and the colluding confluence of Western and local hierarchies How does the current system of state-sponsored AI surveillance in the Indian Ocean World fit into a larger history of casteist, colonial and settler-colonial power in the region? By what routes have panoptic technologies and frameworks transited across the Indian Ocean for centuries?

My research joins a wave of historical scholarship that debunks the novel spectre of data-driven policing, instead situating technologies such as FRT within a much older continuum of oppressive biometrics – that now operate in service of bourgeoisie Global South post-colonial nation-states which directly descend from the violence of empire. In substance, I utilize archival methods: police reports, bureau records, oral histories, and contemporary journalism at the University of Cambridge, the Indian Statistical Institute, and the British National Archives to clarify the role of transoceanic institutions in mass-producing surveillance technology, past and present.

Throughout this work, I wish to intentionally center my own tenuous positionality as a non-Black brahmin Indian-American with maternal ties to the South Asian diaspora in Uganda and family wealth from the Silicon Valley technology industry.

Session 1 Historical Grounds and Evolution of Predictive Policing

Monday 29th, 09:45-11:15

Chair: Antonis Vradis (Room: ScrollBar – ground floor)

Title

Bio

1.3

## Visions of techno-policing at the dawn of the digital age

(Ellefsen – Police Un. College Norway, Lomell – Oslo Norway)

Keywords EDP, digitalization, technopolitics, police, history

**Birgitte Ellefsen** is associate professor at the Norwegian Police University College. Her research focuses on the history of the police, with a special interest for the production and use of knowledge in police-reforms, police-education, and police-practice. She leads the PREVPOL research group on preventive policing, and is currently partner in a research project on the role of digitalization and private economies of knowledge in criminal justice (CRIMKNOW). Among her most recent publications is an article exploring the history of the concept of preventive policing (2023), and a book on the history of the Norwegian police-education 1920–2020 (2021).

Heidi Mork Lomell is professor of Criminology at the University of Oslo. Her research focuses mainly on policing and crime control, with a special interest in the history of various forms of technologies and knowledge production in the criminal justice system. She has co-edited Technologies of InSecurity (2009) and The Mutual Construction of Statistics and Society (2011). She has been part of several European, Nordic and Norwegian research projects, currently a project on the role of digitalization and private economies of knowledge in criminal justice (CRIMKNOW). Lomell is chair of the Nordic Research Council for Criminology (2022-2024).

#### **Abstract**

In 1967 the Norwegian ministry of Justice and the Police established a committee with the mandate to investigate possible outcomes of introducing Electronic Data Processing (EDP) in the police. Ten years later the very first digital registers were established in Oslo Police district and the National Criminal Investigation Service (NCIS/Kripos) (Ellefsen & Lomell, 2024). Digital technology is today at the core of all knowledge production in policing. In this paper, we will explore how digitalization was envisioned and introduced by entrepreneurs inside and outside the police organization.

We know that NCIS (Kripos) asked the Rationalization Directorate for advice on how to make their registers more efficient in 1959, and that NCIS started investigating the possibilities for replacing their file index system with EDP in 1964 (Ellefsen & Lomell, 2024). This said, we don't know who the key actors were and what they hoped would come out of this. This paper will be based on an ongoing archive study regarding the introduction of EDP in the Norwegian police.

Analyzing these documents, we look for answers to the following research questions: Which problems were envisioned to be solved by digital technology? What were the expected and envisioned outcomes of digitalization? Did they expect more knowledge, or new knowledge? Did they see digital technology as an active or a passive part in shaping knowledge? Further, who and what served as inspiration for the Norwegian police? Were there any conflicting visions or competing logics surrounding digital technology?

Session 1 Historical Grounds and Evolution of Predictive Policing

Monday 29th, 09:45-11:15

Chair: Antonis Vradis (Room: ScrollBar – ground floor)

Title 1.4

## What's old is new again: Revisiting historical ethical dilemmas of predictive approaches to public safety.

(Samuels Wortley – Ontario Tech Canada, Henne – RegNet Australia, Wortley – Toronto Canada)

Keywords Predictive Policing, Big Data, Algorithmic Bias, Crime Prevention, Offender Management

**Prof. Kanika Samuels-Wortley** is an Associate Professor and Canada Research Chair in Systemic Racism, Technology, and Criminal Justice in the Department of Criminology and Justice at Ontario Tech University. Her research explores the intersection of race, racism and the criminal justice system.

**Prof Kathryn (Kate) Henne** is the Director of RegNet, the Australian National University's School of Regulation and Global Governance and leads the Justice and Technoscience Lab (JusTech). Her research is concerned with how science and technology influence regulation and governance, focusing on the implications for health, public safety, and well-being.

**Dr. Scot Wortley** is a Professor at the Centre for Criminology and Sociolegal Studies at the University of Toronto. Professor Wortley's research interests include youth crime and victimization, street gangs and gun violence, crime prevention, and racial bias within criminal justice systems.

**Abstract** 

Bio

Law enforcement's use of historical data for predicting crime trends and repeat offenders has evolved with the increased use of complex data technologies that claim advanced predictive capabilities. These advancements have given rise to 'Integrated Offender Management (IOM)' Units in Canada, the U.K., and Australia, leveraging predictive analytics for targeted surveillance, interventions, and enforcement. While proponents highlight the potential for increased public safety and efficient resource allocation, critics express ethical concerns, particularly regarding potential biases against certain racial, ethnic, and socioeconomic groups.

The present study, focusing on IOM Units in Canada and Australia, seeks to examine their alignment with the 1980s theory of selective incapacitation. This policy aimed at predicting highrisk reoffenders, leading to extended incarcerations, draws many parallels to arguments used to support or express concerns related to predictive policing. Through in-depth interviews with police personal in select IOM Units, as well as the persons who are identified as high risk for offending, the following study documents important contextual nuances about the effects of predictive analytics by exploring the perceptions of those who use and are impacted (i.e., identified high risk persons) by contemporary predictive technologies. Findings suggest that while expressions of the ethical and legal dilemmas of predictive policing differ among police and citizens, there are also shared beliefs in its benefits.

Session 2 Evolving State-Citizen Relations with Predictive Policing

Monday 29th, 09:45-11:15

Chair: Björn Karlsson (Room: 3A52 – 3rd floor)

Title

Bio

2.1

# Dreams of increased efficiency and security – Hacking as state surveillance

(Eneman, Ljungberg & Källström-Fäldt – Gothenburg Sweden)

Keywords Government/state surveillance, secret data interception, privacy, law enforcement authorities

Marie Eneman, associate professor in informatics at the department of applied IT, University of Gothenburg. Marie conducts research on surveillance and privacy in the digital society with a particular focus on how surveillance practices within law enforcement agencies are organized and regulated, and the role of the collected data in the broader legal chain i.e. during criminal investigations and court trials. A central question is, how civil liberties such as privacy are affected in relation to the development of surveillance in society.

**Jan Ljungberg**, professor in informatics at the department of applied IT, University of Gothenburg. Jan conducts research on digital platforms, AI, surveillance technologies and surveillance practices. He is especially interested in the consequences of digitalization for society and societal institutions.

Klara Källström-Fäldt is a Senior Lecturer in Photography at HDK-Valand and PhD candidate in Informatics at the Department of Applied IT. Her thesis work critically examines issues related to surveillance and privacy in the digital society. A recent exhibition part of her artistic practice is: Klara Källström & Thobias Fäldt, 26 May – 24 September 2023 at Hasselblad Foundation, Gothenburg.

Abstract

There is currently a strong political pressure to extend the Swedish law enforcement authorities' surveillance capabilities. These initiatives are based on imaginaries that surveillance technology will lead to increased efficiency and security. In 2020 a new law 'secret data interception' was enacted in Sweden, which gave law enforcement agencies legal support to use hacking as a method to hack into a suspect's digital devices, such as computers and mobile phones by exploiting vulnerabilities in the systems, to intercept information in messages and conversations through encrypted applications and programs. The method also makes it possible to activate a camera or a microphone in digital devices. The law was described as important for crime fighting and should have been evaluated before it was made permanent because of its risks for privacy. Instead, legal changes were implemented during autumn 2023 that further extend the mandate for law enforcement agencies to use secret data interception to prevent and investigate serious crimes. The newly gained mandate to use the method for preventive purposes, i.e. without criminal suspicion, can be described as a paradigm shift that allows government hacking with far-reaching risks for democratic rights e.g. privacy and freedom of expression.

The aim of the study was therefore to critically investigate the political discourse in relation to the recent legal changes extending the mandate for law enforcement authorities (where the police is a central actor) to use secret data interception as part of their government work. We have conducted a discourse analysis of policy documents to explore arguments and perceptions expressed by various actors in relation to the extended mandate to use hacking as a method. An important part of the analysis was also to unpack and problematize the meaning of privacy in this context.

Session 2 Evolving State-Citizen Relations with Predictive Policing

Monday 29th, 09:45-11:15

Chair: Björn Karlsson (Room: 3A52 – 3rd floor)

Title 2.2

# Welfare administration as police? Digitalization and control of citizens

(Ikdahl & Eriksen – Oslo Norway)

Keywords Welfare administration, control, oversight, policing

**Ingunn Ikdahl**, Professor, Department of Public and International Law, University Oslo. She works in particular with social security law, welfare law, equality and discrimination law, digital welfare state and legal method.

**Christoffer C. Eriksen**, Professor, Department of Public and International Law, University Oslo. He works in particular with constitutional law, administrative law, EU/EEA law and legal method.

Abstract

Bio

New technology and increased access to data provides opportunities for new ways of controlling citizens. While a growing body of literature critically examines how digitalization shapes policing, and studies of plural policing captures the bonds between police and other organization, less attention has been given to the surge in investigation and sanctions enacted by other administrative bodies as a self-standing phenomena. Digital tools, surveillance and mass data are significant properties also of administrative control. Yet, it remains understudied which factors influence the integration of technology into administrative practices, and how such digitalization affects the nature of the state.

In this paper, we use the Norwegian welfare administration ("Nav") as a case to explore what shapes the new practices of controlling citizens, and how the nature of the state in its relations to its citizens is affected. Previously, Nav primarily restricted its control to individual cases, and only if reasons to suspect welfare fraud. Increasingly, the control unit conducts control of welfare recipients on a broader scale and irrespective of suspicion of welfare fraud. Nav has also developed a range of work methods, investigation by so-called "detectives", closer cooperation with the police, mass data processing.

The new forms of control were shaped by a number of different factors, including political consensus to combat welfare fraud, new legislation providing more discretionary powers, increased resources allocated to the control unit, emergence of new technology and new types of data, and limited oversight.

We argue that the changes of welfare state control is not only a change of scale, but also a change of nature of the state and its relations to its citizens. Investigative police activities re-emerge within public administrative bodies, echoing a former tradition of public policy as policing (Lindenfeld 1989).

Session 2 Evolving State-Citizen Relations with Predictive Policing

Monday 29th, 09:45-11:15

Chair: Björn Karlsson (Room: 3A52 – 3rd floor)

Title **2.3** 

# Perceived Legitimacy of Predictive Policing: Do Political Regimes Matter?

(Gritsenko – Helsinki Finland)

Keywords Predictive policing, legitimacy perceptions, survey experiment, comparative design.

Bio Daria Gritsenko is an Associate Professor in Digital Social Science at the University of Helsinki. Her ongoing research explores the governance challenges posed by the digital transformation of state and society. In 2021, Daria Gritsenko was awarded Nils Klim Prize "for her outstanding research contributions in the intersection between political science, environmental studies and digital humanities". Gritsenko's research has been funded among others by the Finnish Academy, the Kone Foundation, NOS-HS, the Fulbright Foundation, and the European Research Council (ERC).

Abstract The ideas of using advanced computer systems and data analytics in policing are becoming more popular all over the world. While smart algorithms are expected to bring efficiency by addressing well-known deficiencies and biases in human decision-making, there are concerns about opaqueness, privacy risks, algorithmic biases and lacking accountability that may undermine the institutional legitimacy of police. This is problematic,

because social institutions need legitimacy if they are to operate and develop themselves effectively.

Currently, there are a handful of empirical studies that explore legitimacy perceptions of so-called predictive policing. Yet, they mostly have been conducted in democracies. While we know about differences in legitimation process in democratic and non-democratic settings, whether political regimes affect governance preferences and legitimacy beliefs concerning the deployment of predictive policing is not known. My goal is to address these limitations by conducting a comparative study of how citizens perceive the legitimacy of predictive policing in different political contexts.

Studies of institutional legitimacy show that trust is an important component for building legitimacy. Hence, I hypothesize that trust in government and trust in technology are key factors that determine individual perception of predictive policing legitimacy. Yet, in cases where an individual trusts government but not technology (or vice versa), the political regime will be a mediating factor as it has a key role in structuring state-citizen relations.

To test these hypotheses, I designed an online-based conjoint survey experiment that disentangles the relationship between trust in government and trust in technology as factors impacting evaluations of legitimacy of algorithmic governance. I conduct the experiment in a non-democratic context (Kazakhstan) and replicate it in a fully democratic country (Finland). The results provide new insight into the contextual factors that determine legitimacy judgments regarding the use of algorithms in policing.

Session 2 Evolving State-Citizen Relations with Predictive Policing

Monday 29th, 09:45-11:15

Chair: Björn Karlsson (Room: 3A52 – 3rd floor)

Title 2.4

# The patchwork of Surveillance: Looking at the oligopticon of inner border control

(Raviola – Gothenburg Sweden)

Keywords Internal borders, Nordic countries, oligopticon, digital work

Bio **Elena Raviola** is Torsten and Wanja Söderberg Professor in Design Management, Academy of Art and Design and Director of Business and Design Lab, University of Gothenburg, Sweden. Her main research interest concerns the role of digital technologies in organizing professional work, theoretically developing the intersection between institutional theory and science and technology studies. She has long studied the news industry in Italy, France, and Sweden in both established and new news organizations. Since 2022, she is leading the Nordic project Dinobord (www.dinobord.eu), exploring the intersection between openness and security at Nordic borders, especially in relation to digital surveillance practices.

Abstract

The Schengen agreement in 1995 transformed Europe inasmuch as it ontologically and practically transformed its borders into two categories: internal and external borders. The call was then to reinforce and coordinate the national efforts to control external borders and at the same time to dismantle internal border control. Customs and police authorities decreased their interventions at those borders that were considered internal and national states legally agreed not to perform internal border control. Over the last decade however internal European borders have been increasingly in focus as critical to maintain national security and a series of crises, like the Fukushima disaster in 2011, the so-called migration crisis in 2015, the pandemic in 2020-2022 and the Russian invasion in Ukraina in 2022-2023, have justified a return of internal border control of goods and people, both legally and practically. Although this return has at times meant a full-time control of the internal borders, in the Nordic countries it has often meant partial control.

This paper focuses on the practices of internal border control between Sweden and Denmark, specifically from the point of view of the Swedish side of the Oresund bridge that connects the Danish capital of Copenhagen to the Swedish third largest city of Malmö. As a part of a larger Nordic project on digital surveillance at the border (www.dinobord.eu), the paper is based on a qualitative study of border practices at the Oresund bridge, including interviews, observations and document analysis, conducted in 2023. This border is particularly interesting because of its supposedly undramatic nature in a wider European perspective and the position is of special interest because it captures the control work done to filter the flows of goods and people from South to North.

In connection to the digitalization of policing and taking a broad view of policing as a control practice distributed to many actors, this paper highlights the patchwork of surveillance at the borders, involving private and public actors with different interests and technology and entangling bodies, animals and technologies in situated discretion. The preliminary results point at moving beyond the idea of a panopticon created by digital technologies and rather evokes the idea of the oligopticon, that Latour offered us in *Paris. The invisible city*.

Session 3 Surveillance and citizens

Monday 29th, 11.30-13.00

Chair: Anda Adamsone-Fiskovica (Room: ScrollBar – ground floor)

Title 3.1

Saving face?
Recent developments in public space surveillance in the UK

(Vradis & Papada – St. Andrews UK)

Keywords Surveillance; Facial recognition; Urban space

Bio **Evie Papada** is a Research and Policy Analyst at the V-Dem Institute. She holds a PhD in Human Geography (University of Loughborough, UK) and has published widely on EU asylum and immigration policies. Evie has worked in research and policy related roles, within and outside higher education, including international organizations within the broader field of human rights (UNHCR, Amnesty International, MSF).

**Antonis Vradis** is faculty and Director of the Radical Urban Lab (RUL) in the School of Geography and Sustainable Development, University of St Andrews, Scotland, UK. Antonis works at the intersection of urban, policing and migration studies, with a particular focus on field-oriented work with grassroots and underrepresented communities.

**Abstract** 

The UK has long been held as a world leader in technologies and practices of surveillance, yet recent developments in the surveillance of public space in the country has been controversial: for example, legal challenges to the deployment of Facial Recognition Technologies (FRT) forced the Mayor of London to issue a letter (Linden, 2019) admitting a scheme trial ran with little to no oversight. Live facial recognition has been predominantly linked to the country's long-proliferating CCTV cameras; it remains controversial as it involves the real time and indiscriminate capturing of biometric data in public spaces: unlike the 'one-to-one matching' offered by facial recognition systems used in smartphones or airports, LFR in public spaces operates a 'one-to-many' matching, searching for image matches in one or more databases. Here, algorithms function as decision-making tools, helping identify individuals present in urban public spaces and assessing the level of risk they pose. This type of mass surveillance therefore poses several challenges including the heightened expectation for police authorities to secure public spaces (Lequence Roth, 2021). In doing so, it reframes the way we have traditionally understood our participation in urban public space as surveillance breeds suspicion: never before have we been confronted with the knowledge that our mere physical presence in the city may at any point be used against us, as incriminating evidence. This paper discusses these key recent developments in the surveillance of public space in the UK, focusing on two key new pieces of legislation in the country: the Data Protection and Digital Information (No. 2) Bill (proposed), and the UK Public order bill (2023).

Session 3 Surveillance and citizens

Monday 29th, 11.30-13.00

Chair: Anda Adamsone-Fiskovica (Room: ScrollBar – ground floor)

Title **3.2** 

# Traffic, surveillance and distributed agency: the ambiguities of mundane technologies

(Kilis & Adamsone Fiskovica – Baltic Studies Centre Latvia)

Keywords Surveillance, predictive policing, traffic, distributed agency

**Emils Kilis** is a senior researcher at the Baltic Studies Centre in Riga. He specialises in social studies of science, technology and expertise.

**Dr.sc.soc. Anda Adamsone-Fiskovica** is a senior researcher at the Baltic Studies Centre in Riga, Latvia. She has an academic background in sociology and in science and technology studies. While currently specialising in social studies of agriculture and food, she also holds professional interest in innovation studies and topics related to digitalisation across various domains of modern life, including policing.

**Abstract** 

Bio

The paper explores the introduction and implementation of digital traffic surveillance technologies in Latvia. Our primary examples are the road traffic management solution FITS (Future Intelligent Transport Systems) and speed cameras, accompanied by several satellite cases such as an unmarked police bus with a 360-degree camera, drones, and smartphone apps. These cases illustrate different degrees and forms of reliance on digital systems, historical records and data in the context of traffic monitoring and policing. While the deployment of these digital tools raises a broad range of new ethical, legal, and social issues associated with data governance and surveillance in public spaces, this paper seeks to address a hitherto underappreciated aspect of traffic surveillance. Specifically, we explore the agency and ontological multiplicity of surveillance subjects and objects (both human and non-human) enacted by the new digital traffic management tools, as well as the new and imagined relationships between civilians, law enforcement and traffic enabled by these technologies. Drawing on a qualitative study based on interviews with various stakeholders, media analysis and document analysis, our paper argues that traffic surveillance is a way of knowing traffic, reconfiguring the ontology of traffic, reallocating agency among human and non-human entities, and adjusting the environment accordingly. What is more, the introduction and use of digital traffic surveillance technologies should be viewed in the broader context of traffic automation and associated attempts to provide technological solutions to contentious political issues while circumventing the need for public debate.

Session 3 Surveillance and citizens

Monday 29th, 11.30-13.00

Chair: Anda Adamsone-Fiskovica (Room: ScrollBar – ground floor)

Title 3.3

Citizen App: The Digitization of Crime and Lateral Surveillance in New York City

(Ridell – UCL UK)

Keywords Digitization of crime, lateral surveillance, NYPD, sousveillance.

Bio Alice Riddell is a fourth-year PhD candidate at the Centre for Digital Anthropology at University College London. Her research examines the digitization of safety and security as a practice in Brooklyn, through Citizen, a live crime and safety tracking app, and social media, like Instagram and TikTok. She is further interested in the material culture of self-defense in the form of safety-gadgets, such as alarms and tasers. Alice

has work published by Social Inclusion and Anthropolitan. She is currently a graduate teaching assistant in the

Anthropology department at UCL.

Abstract Citizen is a live crime and safety tracking app in New York City that uses AI to monitor police scanners for incidences that are relevant to "public safety", whilst also utilizing user-recorded footage, as users near a crime, fire or accident, are encouraged to 'go live' and film unfolding events. Citizen sends out alerts of these incidences, via notifications, to users who can then comment, submit additional information and post expressive emojis as incidences unravel. Through this lens, my ethnographic research investigates the impact

of the digitization of crime and lateral surveillance in gentrifying neighbourhoods in Brooklyn.

The relationship between local law enforcement and Citizen app is murky. At its inception in 2016, the NYPD decried Citizen for encouraging engagement with active crime scenes. By 2018, a former NYPD spokesperson was hired as head of communications of Citizen and as of 2021, the ex-police commissioner, Bill Bratton, served as an executive on the board. Previously, Bratton had championed the use of broken windows policing and controversial predictive policing technologies, like PREDPOL. Furthermore, Citizen regularly posts that 'ShotSpotter' has detected gunshots, an audio surveillance technology utilized by the NYPD, in which hundreds of sensors have been deployed on rooftops across areas of Brooklyn deemed high in gun violence. This raises questions about the extent to which Citizen and the NYPD share information, personnel, and technology, questions that become more pressing as police radio encryption encroaches across the city. Citizen also has a self-reporting affordance, allowing users to disseminate hyper-localised community news, often recording 'police activity' in their neighbourhoods, further complicating the dynamic.

My paper will address these tensions and ethnographically explore the platformization of crime, and by extension, policing, whilst raising further questions about the triadic entanglement between private tech companies, state actors and citizens.

19

Session 3 Surveillance and citizens

Monday 29th, 11.30-13.00

Chair: Anda Adamsone-Fiskovica (Room: ScrollBar – ground floor)

Title

## **Participatory victimization?** Tensions in security technologies directed to citizens

(Winter – Stockholm Sweden)

Keywords Public participation, crime prevention, security technologies, science and technology studies

Katarina Winter, PhD in sociology interested in knowledge production and expert-public relationships, particularly within the alcohol and other drugs field and digital crime prevention. My research positions theoretically within Science and Technology Studies (STS) and sociological perspectives on communication, citizen participation, and the everyday. I often engage with how the everyday is directly or indirectly entwined in the establishment of knowledge and technologies. My past and ongoing projects include: 1. Coproduction of addiction expertise, 2. Knowledge use in alcohol and drug policy, 3. Coproduction of risks in injection drug use, 4. Digital crime prevention in municipalities, 5. Security technologies directed to citizens, 6. Sociological/ choreographic artistic projects on memory and time.

**Abstract** Parallel to the rise of digitalization in various welfare areas, the concept of safety and/or security has shifted its focus, from traditional welfare concerns to matters of (fear of) crime. Security technologies, including security

maps, sensors, and mobile apps, are being developed to create secure communities, ensure safe public housing, and provide citizens with tools to enhance their everyday safety.

This project specifically focuses on "security apps" – mobile applications directed to citizens. Through a sociological approach on producer-user relationships, we explore expectations behind and the actual usage of security apps in everyday life. Drawing on fieldwork involving observations of and interviews with private actor initiatives and their users, the project asks what types of promises and implications these apps brings to questions of responsibility and citizen participation.

In contrast to many other crime predictive and preventive technologies, security apps emphasize public safety as a matter of active dialogue and participation. At the same time, initiatives often draw on traditional fear of crime discourses, perspectives, and premises regarding the nature and function of security technologies, positioning citizens in a constant role of being unsafe and/or potential victims of crime.

The struggle to define the responsible and/or participatory roles of citizens is an ongoing negotiation within these initiatives. On the one hand, there is a consistent push toward considering citizens as essential users of technology, promoting a form of participatory democracy. On the other hand, such "participatory citizens" often prove challenging to reach and engage, reflecting a public disinterest in security technologies, as well as a disinterest in the (broader) public from the producers behind such initiatives. Instead, producers of security technologies often redirect their focus toward other actors (the police, municipalities, schools), who emerge as new target groups.

Bio

Session 4 Predictive Policing as a Knowledge-Making Process

Monday 29th, 11.30-13.00

Chair: Anu Masso (Room: 3A52 – 3rd floor)

Title **4.1** 

Abstract

# Making Information Matter: Predictive policing and associative logics

(Kaufmann – Oslo Norway)

Keywords Association, In-formation, life cycles, predictions in law enforcement

Bio Mareile Kaufmann's background is in Criminology and Cultural Studies. She is a professor at the Department of Criminology and Sociology of Law, University of Oslo with a research focus on data practices. She works with qualitative research designs that combine theory with innovative angles and strong empirical components. For her work she was allowed to collaborate with intelligence officers, state officials, forensic scientists, software developers, hackers, artists and children. She was awarded several grants and prizes, amongst which is the

ERC-funded project Digital DNA and the University of Oslo's annual Award for Young Researchers.

Information matters to us. Whether recorded, recoded or unregistered – information co-shapes our present and our becoming. When critically examining the digitization of law enforcement it is relevant to reflect about the ways in which information takes form and forms digital practices in return. The use of predictions in law enforcement is discussed as an example of associative practices. Association is an information practice that emerges in different societal fields, which underlines the importance of its critical discussion.

The presentation first advances a methodology for studying the materiality and liveliness of information. Drawing on empirical material, the life cycle of information is deployed to illustrate how predictions come about and how associative practices make information matter in law enforcement. Finally, it is considered what it means to make matter and how we can make differently. In doing so, the talk summarizes selected arguments of Kaufmann's new book *Making Information Matter*.

#### 21

Session 4 Predictive Policing as a Knowledge-Making Process

Monday 29th, 11.30-13.00

Chair: Anu Masso (Room: 3A52 – 3rd floor)

Title

#### 4.2

# Charting the Knowledge Networks of Policing in Norway: A Citation Network Analysis

(Løvschall Langeland – Oslo Norway)

Keywords

Evidence-based policing, Knowledge-based policing, Network analysis, Policy documents, Knowledge integration

Bio

**Camilla Løvschall Langeland** is a doctoral research fellow at the Department of Criminology and Sociology of Law at the University of Oslo. Her PhD project examines the emergence of knowledge-based approaches within the police force. The doctorate is part of the research project "CRIMKNOW" which examines the role of digitalization and private economies of knowledge in criminal justice.

Langeland holds a master's degree in criminology from Aalborg University. In her master's thesis, she studied Knowledge-Based Policing and shed light on how knowledge is acquired, shared, and generated within the Norwegian police. The project was part of the research project: "Algorithmic Governance and Cultures of Policing" (AGOPOL).

#### **Abstract**

This paper aims to chart the knowledge networks of policing in Norway by examining citation practices in key policy and other important documents related to the promotion of knowledge-based policing within the police organization. By conducting a thorough citation network analysis (CNA), the study aims to gain insights into the integration of knowledge work into the goals and objectives of the police force, as well as the role of epistemic communities in shaping knowledge-driven practices within the police organization.

The analysis provide a deeper understanding of the complex relationship between knowledge creation, dissemination, and implementation within policing as an epistemic community, which involves a range of actors, such as researchers, practitioners, policymakers, and other stakeholders. Moreover, the study help identify the ways in which epistemic networks may either facilitate or hinder the integration of knowledge-based practices and principles within the police organization.

The study is relevant to current debates on policing and knowledge-based practices, highlighting the importance of collaboration between researchers, practitioners, and policymakers in the implementation of evidence-based policing (EBP). Finally, this study contributes to the development of theoretical frameworks that articulate the role of epistemic communities in shaping knowledge-driven practices within the police organization.

Session 4 Predictive Policing as a Knowledge-Making Process

Monday 29th, 11.30-13.00

Chair: Anu Masso (Room: 3A52 – 3rd floor)

Title 4.3

> **Behind closed sources:** 'Clandestine openness' of OSINT in law enforcement investigations during an era of openness

(Hartmann – SDU Denmark)

Digital policing, open-source intelligence, transparency. Keywords

Mia Hartmann is a postdoctoral researcher at the Center for War Studies at the Department of International Politics, University of Southern Denmark. Her research is part of the research project IntelHub, Research Hub for Scandinavian Intelligence Studies, Funded by the Carlsberg Foundation. www.intelhub.dk.

**Abstract** This study delves into a paradoxical tendency in government use of OSINT that I propose as 'clandestine openness'. Drawing from interviews with police OSINT criminal investigators from Denmark, Norway, and Germany, I illustrate how, on one hand, OSINT aligns with the societal ideals associated with openly available data. On the other hand, the increasing obscuration of openly accessible data, in combination with covert practices, can foster clandestine (illicit and unauthorised) practices, 'Clandestine openness' refers to the concealment of unauthorised OSINT activities from documentation procedures, all the while upholding

an overall atmosphere of transparency and adherence to institutional norms.

More specifically, the study shows how factors of legally "uncharted territories" of the internet, people's unawareness that their information is digitally exposed, and the development of informal moral etiquette contribute to clandestine practices of OSINT in police investigations. The notion of clandestine openness is crucial for recognizing the integration of emergent technologies in law enforcement, which can coexist alongside formal procedures.

Bio

Session 4 Predictive Policing as a Knowledge-Making Process

Monday 29th, 11.30-13.00

Chair: Anu Masso (Room: 3A52 – 3rd floor)

Title

Bio

4.4

# Machineries of knowledge construction: Exploring the epistemic agency of digital systems in policing

(Lundgaard & Flinterud – Police Un. College Norway)

Keywords Epistemic agency, actor-network theory, control rooms, Twitter, police systems

**Jenny Lundgaard** holds a PhD in criminology, in which she did ethnography in police emergency control rooms (UiO, 2019). She does research on a broad specter of digital knowledge practices within in the police, including drones and various digital police systems.

**Guro Flinterud** is a folklorist and culture studies researcher, holding a PhD from the University of Oslo. Her main field of research is digital culture. I am currently working on projects on the legitimacy of online surveillance and the polices use of social media.

**Abstract** 

Understanding the contours and dynamics of police knowledge production, necessitates not only to take into consideration the role of organizations and humans, but also of the various technologies used in policing.

This article is an exploration of two digital technological systems used by police control rooms in Norway: their internal system for call handling, control and command, and the social media platform Twitter. The control room are understood as an epistemic culture (Cetina, 2007), in which we elucidate the systems as machineries of knowledge construction. Using Adams & Thompsons (2016) ground-breaking framework for interviewing digital objects, this article scrutinizes how digital systems shape and define what becomes knowledge, uncovering and exploring how such digital systems have epistemic agency. The origins of the systems, one police-developed, the other not, lay the basis for the systems' affordances, and the epistemic cultures they work within. Whilst one works as a mostly friction-free system based on, and enhancing, internal police logics, the other is disruptive, laying a foundation for criticizing and challenging the actions and logics of the police.

Session 5 Prediction and Police Power

Tuesday 30th 09.15-10.45

Chair: Georgios Mattes (Room: ScrollBar – ground floor)

Title

5.1

# Prediction, Politics and Police Power in the Digital Era — The Case of POL-INTEL

(Karlsson & Galis – ITU Denmark)

Keywords State making, POL-INTEL, translation, police power

Bio

**Björn Karlsson** is a PhD student at the IT University of Copenhagen in the Critical Understanding of Predictive Policing (CUPP) project where the object of his dissertation is the POL-INTEL program of the Danish police. Björn's work draws on Science and Technology Studies, critical theory, political philosophy, epistemology, ontology, critical criminology and data studies.

Vasilis Galis is an Associate Professor in the Technologies in Practice (TIP) group at the IT University of Copenhagen. His research on the digitalisation of the welfare state, and on law enforcement, is informed by STS and qualitative methods. Galis is the Principal Investigator of Welfare after digitalisation (funded by the Velux foundation in Denmark) and Critical Understanding of Predictive Policing (funded by Nordforsk). Galis has published in leading international journals including Political Geography, Science, Technology and Human Values, Science as Culture, Social Media + Society, Social Movement Studies. Galis' research is interdisciplinary and is impregnated by a strong epistemological solidarity with social movements.

#### Abstract

This presentation aims to link the study of predictive policing to police power and state-making. This analytical perspective has been relatively common in wider policing studies historically yet is typically absent from contemporary empirical investigations of (digital) law enforcement. The empirical case at focus is the Danish POL-INTEL system, a customization of Palantir Technologies' Gotham platform.

This study builds on ethnographic interviews with the Danish police, Palantir, and a few individuals profiled by the police to methodologically "follow the data" (Kaufmann et al., 2020) through POL-INTEL in three instances of translation (Callon, 2003): 1. The input instance that details forms of feedback loops (Brayne, 2021), police discretion in the digital era and data entry. 2. the black box of POL-INTEL that investigates how data is structured and organized in relation to the architecture of code in the system. It is in this instance that it is possible to attend how data "changes scales" (Latour, 1983) from a singular street event to how events are aggregated and turned into statistics and visualizations. 3. such material is then turned into a variety of output in the form of court cases, statistics which "form the state's knowledge of itself" (Foucault, 2009), visualizations which form the basis for new police interventions, as well as news stories.

Through attending POL-INTEL's three instances of translation, we analyze how police power is enacted as a paradox imbued with failures of translation, and how the reproduction of ideology and state power on different scales occurs in POL-INTEL.

Session 5 Prediction and Police Power

Tuesday 30th 09.15-10.45

Chair: Georgios Mattes (Room: ScrollBar – ground floor)

Title

5.2

# More than software vendors and analysts. Instances of Palantir's presence in Europe

(Vlassis – ITU Denmark)

Keywords Big Tech, Data analysis platforms, Surveillance capitalism

Bio Vasileios-Spyridon Vlassis is an Associate professor at the IT University of Copenhagen. He has a background

in Mathematics and Philosophy of Science. His research evolves around bordering, policing, surveillance, and the digitalization of the state. For his PhD thesis, he investigated border guards' practices and the registration of "irregular" migrants crossing to the European Union through the maritime Greek-Turkish borders. He has also conducted research on the Danish Police's use of data integration platforms and their shift toward Intelligence Led Policing. For his latest research project he is researching digital and analog border work in Nordic borders.

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Abstract

This paper is a contribution to the critical literature that examines the involvement of data analytics and software engineering companies in statehood and public administration, through contracts that outsource functions that have traditionally being carried out by state agencies, or by providing software products and solutions in the form of data analytics and integration platforms. Participation of non-state actors in statehood is nothing new in itself. From healthcare to migration and border control, NGOs have adopted "deputy roles" and multinational corporate companies have a significant and established agency, and "by controlling investment and employment, coerce individual states into accommodating their demands even when these may conflict with the social and economic priorities of the states concerned" (Skinner, 2009). However, Big Tech and consultancy companies seem to participate in the aforementioned constellation of power in novel ways that challenge e.g. traditional models of Public Private Partnerships (Taylor, 2021).

This paper seeks to contribute to the discussion around said participation, focusing on the US based software company Palantir. The paper examines the legislative effort that was needed for POL-INTEL (the Danish Police's customised version of the Gotham platform) to be compatible with the Danish legal framework, the secretive and controversial presence of the company in Greece during the COVID-19 pandemic, and its involvement with the UK's National Health System. The paper is based on empirical material including interviews with Danish Police officials, Palantir executives, Danish politicians, and other actors, as well as press coverage of the company's presence in Europe, with a focus on Greece, Denmark, and the UK. In addition, public material produced by Palantir is used to investigate the ways in which concepts like ethics, democracy and accountability are being transformed and used in the marketing discourse of the company.

Session 5 Prediction and Police Power

Tuesday 30th 09.15-10.45

Chair: Georgios Mattes (Room: ScrollBar – ground floor)

Title **5.3** 

## Algorithmically generated suspicion: Introducing intelligence-led and predictive policing in the Danish National Police

(Möller Pedersen – Copenhagen Denmark)

Keywords Intelligence-led and predictive policing / Fundamental rights / Privacy & data protection / Criminal procedural law / Digitalisation of policing

**Anja Møller Pedersen** is a postdoc at University of Copenhagen (UCPH) and the Danish Institute for Human Rights (DIHR) working in the intersection between privacy/data protection, human rights and technology focusing on the digitalisation of policing and intelligence activities. Anja holds a PhD degree from UCPH (cofunded with DIHR) based on her thesis 'The fundamental rights to privacy and data protection in the EU legal

order: Reconciling rights and rationales'. Anja has a background as an attorney and human rights lawyer and she has been teaching at UCPH since 2012 within fundamental rights, constitutional law and data protection.

Abstract

Bio

In 2017, the Danish National Police acquired a new, 'Al-ready', policing platform from the US tech company Palantir. This platform, POL-INTEL, enables data analysis across police registers and other available intelligence, including open source, representing a quantum leap in the transition towards intelligence-led and eventually predictive policing in Denmark. While speeding up police investigation and improving its efficiency, putting trust in network analysis, cross integration of data and algorithmically generated suspicion without careful scrutiny and strong legal safeguards, has serious fundamental rights implications. Nevertheless, the bill supporting the platform was passed without much ado, leaving most considerations of necessity to police discretion, without acknowledging the actual implications for privacy/data protection, criminal justice and democracy.

Whilst true that the platform does not collect new data, subjecting data sets potentially covering the entire Danish population to network analysis and cross integration of data, the results may be just as intrusive as those only otherwise obtainable though coercive measures. However, those subject to analysis do not necessarily know until they are 'charged' with a crime. What happens in between? Such data-driven policing thus challenges the presumption of innocence and the power balance between police and individual, likewise emphasised by the lack of essential data protection rights of those subject to analysis.

Relying on legal dogmatic methods, the presentation explores the fundamental rights implications of POL-INTEL, focusing on privacy, data protection and the right to a fair trial. It aims at strengthening the legal framework surrounding the platform, likewise in light of the proposed AI Act, and reconceptualising the presumption of innocence in data-driven policing.

Session 5 Prediction and Police Power

Tuesday 30th 09.15-10.45

Chair: Georgios Mattes (Room: ScrollBar – ground floor)

Title 5.4

## Anti-Trafficking Predictive Policing: Examining the Impacts of Datafication in North America

(Heynen – York Canada, van der Meulen – Toronto Metropolitan Canada)

Keywords Human trafficking; sex work, police surveillance; datafication.

Bio **Rob Heynen** is Associate Professor in Communication & Media Studies at York University, Toronto. His

research in surveillance studies engages with biometrics, borders, policing, and human trafficking, with a focus on data-based media technologies and practices, and on the politics of race, gender, and capitalism. He is the co-editor of two books on surveillance, *Making Surveillance States: Transnational Histories* (University of Toronto Press, 2019) and *Expanding the Gaze: Gender and the Politics of Surveillance* (University of Toronto Press, 2016), and author of *Degeneration and Revolution* (Brill, 2015).

**Emily van der Meulen** is a Professor in the Department of Criminology at Toronto Metropolitan University Ontario, Canada. She conducts research in the areas of sex work and human trafficking, prison and community-based harm reduction, and gendered and transnational surveillance. She is co-editor of seven books, the most recent of which are *Trafficking Harms: Critical Politics, Perspectives, and Experiences* (Fernwood Publishing, 2024), *Disability Injustice: Confronting Criminalization in Canada* (University of British Columbia Press, 2022), and *Making Surveillance States: Transnational Histories* (University of Toronto Press, 2019).

Abstract

The objective of this paper is to analyze the implications of the datafication of anti-human trafficking policing in the North American context. Trafficking has become an increasingly prominent framework for addressing a disparate range of phenomena, from irregular migration to sex work, with the latter in particular driving policing practice. As with predictive policing more generally, anti-trafficking datafication is shaped by growing public-private collaborations, with NGOs playing a critical role alongside tech companies and state agencies in the design of predictive tools. Sex worker and migrant justice advocates, however, argue that anti-trafficking technologies produce significant harm precisely for those ostensibly being 'saved.'

Our methodology utilizes critical discourse analysis and STS/critical data studies approaches. Analyzing black-boxed systems requires drawing on a range of sources, including technical documentation (e.g., engineering publications, patents, corporate and NGO sources), media reporting, government documents (e.g., legislative hearings, policy documents), and NGO materials.

Our findings suggest that dominant and harmful conceptions of sex work are encoded in the design of predictive policing tools, and that privacy frameworks are inadequate to understand or address the problems produced. In our presentation, then, we discuss specific predictive technologies used by police, for example the DARPA-initiated DIG-Memex project and Thorn's Spotlight tool. These tools allow for large-scale surveillance of sex work-related social media, message boards, ad sites, and other online data, including on the deep/dark web, using Natural Language Processing, biometrics, and other tools. Specifically, we focus on 'indicators' of trafficking and how these inform data labelling and the proxies used in algorithmic profiling.

In terms of our future scope, we are currently conducting interviews with police, lawyers, and those targeted by anti-trafficking measures. Later we will also interview engineers and design professionals to better understand how anti-trafficking systems are built.

Session 6 Constructing Social and Structural Inequalities through Predictive Policing

Tuesday 30th 09.15-10.45)

Chair: Helene Gundhus (Room: 3A12-14 – 3rd floor)

Title 6.1

Forecasting youth crime

- From personal archives to intelligence sharing

(Skjevrak – Oslo Metropolitan Norway &

Gundhus – Oslo Norway)

Keywords Early intervention, prevention, resistance, risk assessment, accountability, youth crime

Bio **Pernille Erichsen Skjevrak** is a PhD student at the Centre for the study of Professions, Oslo Metropolitan University. Her research interests are social deviations and professional actors' assessments and justifications for preventive measures. In her PhD project, Pernille aims to examine the interplay between structured assessment tools and methodologies and professional discretion in preventive policing.

**Helene O. I. Gundhus** is Professor and head of Department of Criminology and Sociology of Law at the University of Oslo, and Professor II at the Norwegian Police University College. Her research interests include police methods and technology, police professionalism, crime prevention and security. She has also published

on issues to do with risk assessments and precautionary logics, migration control and transnational policing.

Abstract

Predictive policing aims for making the police more future-oriented, and to capture the likelihood of risks. In our presentation we will look at predictive policing through the lens of a crime prevention initiative in Norway where police officers used a selection of *indicators* to forecast youths at high, medium and low risk (described as "candidates"). The backdrop for this initiative was the crime prevention section questioning if the work was too reactive as they primarily worked with young repeat offenders. The indicators used consisted of registered incidents of crime or public disorder and selected risk factors associated with crime. This approach was novel for two primary reasons. Firstly, the traditional crime prevention section collaborated with an intelligence section to prevent youth crime, which is unusual and partly controversial in a Norwegian context (Gundhus, Skjevrak & Wathne, 2023). Secondly, they systematically identified "candidates" based on data registered in a range of police databases. A novel aim of this initiative was to use selected risk indicators to identify the "low-risk group" in order to implement preventive measures. The standardization and increased documentation of assessments, aiming to make the police knowledge more intelligence-based, neutral, and objective, was met with both resistance and support, and we will analyze and discuss why.

Session 6 Constructing Social and Structural Inequalities through Predictive Policing

Tuesday 30th 09.15-10.45)

Chair: Helene Gundhus (Room: 3A12-14 – 3rd floor)

Title 6.2

# Pre-crime and punishment: the expansion of punishment through predictive policing

(Levicnik – University of Luxembourg)

Keywords Pre-crime, risk assessment, predictive policing, punishment, preemption

Bio **Pia Levicnik** is a final year PhD candidate at the University of Luxembourg. She obtained her master's degree in law at the University of Ljubljana and her LL.M. at the Goethe University in Frankfurt. She has previously worked as a legal counsellor in the field of telecommunications and worked in policy on internet safety at the European Commission. Her main research interests are criminology; critical legal studies; social harm; law and artificial intelligence; the effects of information technologies on legal and political systems.

**Abstract** 

Criminal justice systems worldwide are embracing programmes and practices that aim to identify individuals or groups of individuals 'at risk' of committing future crimes. With the aid of artificial intelligence, the use of risk assessment tools analysing individual static (fixed, immutable characteristics) and dynamic (circumstances amenable to change) factors has now expanded to unprecedented grounds, aiming to identify not only reoffending but also first time offending by individuals who do not yet have criminal history, or do have one but are currently not involved in an ongoing investigation, criminal proceedings or correctional programmes.

In my research, I address this paradigmatic temporal and penological shift: the objective to capture and analyse as much data as possible to pre-empt criminal involvement is, I argue, problematic as it creates more and more connections between 'regular' identities, behaviours, or life events (family and marital circumstances, academic success, leisure time, choice of friends) and legal facts considered important for criminal law or criminal procedure; it brings the 'everyday' into the 'criminal'. Such persistent pattern seeking not only creates correlations – with enough data and processing zeal everything has a correlate – but also creates an environment where their epistemic value is on par with causality, which justifies further punitive measures to 'stop crime before it occurs'. This new temporality and transfer of epistemic authority shakes the very foundations of punishment and (un)just deserts. In predictive policing contexts, this kind of employment of risk assessment tools often results in de facto penalization, such as continuous surveillance; daily stops and frisks; regular questionings, arrests, and detainments; revocations of residence permits; informing employers about the placement on 'risk lists' and subsequent loss of work; interventions in family life and separations of parents and children etc.

I maintain that this fiction of future crime — "pre-crime" — justifies pre-emptive state intervention based on personal facts or characteristics that are not part of (past) adjudicated criminal behaviour and are largely immutable personal circumstances or lifestyle choices historically associated with underprivileged communities and disadvantaged socio-economic backgrounds. The utilitarian 'risk identification and reduction' imperative, previously used inside the criminal process, has now — through the same, 'scientific' means — expanded outwards to capture more lives, more behaviours, and more perceived threats in need of management.

Session 6 Constructing Social and Structural Inequalities through Predictive Policing

Tuesday 30th 09.15-10.45)

Chair: Helene Gundhus (Room: 3A12-14 – 3rd floor)

Title **6.3** 

# Anticipating crime: dataification, standardization and visibility

(Gundhus – Oslo Norway, Skjevrak & Wathne – Oslo Metropolitan Norway)

Keywords Dataification, intelligence-led policing, prediction, risk assessment, standardization

Bio Helene O. I. Gundhus is Professor and head of Department of Criminology and Sociology of Law at the University of Oslo, and Professor II at the Norwegian Police University College. Her research interests include police methods and technology, police professionalism, crime prevention and security. She has also published on issues to do with risk assessments and precautionary logics, migration control and transnational policing.

**Christin Thea Wathne** is a Research Director and Research Professor at Work Research Institute (AFI), Oslo Metropolitan University in Norway. Her research interests include leadership and management, New Public Management, organizational development, organizational learning, professions, social identity and working environment and mastering.

**Pernille Erichsen Skjevrak** is a PhD student at the Centre for the study of Professions, Oslo Metropolitan University. Her research interests are social deviations and professional actors' assessments and justifications for preventive measures. In her PhD project, Pernille aims to examine the interplay between structured assessment tools and methodologies and professional discretion in preventive policing.

**Abstract** 

Aradau and Blanke (2017) argue that digital mode of predictions transforms police prevention to be more concerned with short-term near-real-time decision making. This article contributes with empirical research examining how police officers are using digital devices to anticipate future crime. In Norway, intelligence-led policing and risk assessment tools is applied in crime prevention. The *Police Intelligence Doctrine* (2014) positions data-driven intelligence as a key element of knowledge-based management and practice. The doctrine constitutes a management concept that organize how the police shall act and be and represents a new 'epistemic power' in the police organization and the society (Archer et. al. 2020).

Drawing on interviews and observations, the article aims not only to focusing on the role of digital data and software in the creation of potential criminals and crime, but exploring the *co-construction* as a process that involves both kinds of actors: human ones, such as programmers, end users and experts, as well as non-humans. We will particularly explore the drift towards the increased recording, standardization and data integration that intelligence-led policing requires and analyse how this is domesticated in the police organisation. The hyper-visibility afforded by digital architectures (Flyverbom 2022) contributes with sociotechnical images and practices translated and domesticated in a police organization. The paper contributes to a discussion on how does the datafication of the future change present policies, collective practices of imagining, planning, and controlling future(s).

Session 6 Constructing Social and Structural Inequalities through Predictive Policing

Tuesday 30th 09.15-10.45)

Chair: Helene Gundhus (Room: 3A12-14 – 3rd floor)

Title **6.4** 

## From Myth-Making to Quiet Dereliction: An Overview of Predictive Policing in France

(Treguer & Nano – La Quadrature Du Net France)

Keywords Predictive policing, market-based solutions, criminological doctrines, administrative opacity.

**Félix Tréguer** is associate researcher at the CNRS Center for Internet & Society. His research looks at the political history of the Internet and computing, power practices like surveillance and censorship, and more broadly the digital transformation of the state and of the security field. He is a member of La Quadrature du Net, an advocacy group dedicated to the defense of civil rights in relation to digital technologies.

**Edlira Nano** is a programmer, teacher, and hacktivist whose work focuses on digital rights and alternative technology. In 2023, she began a PhD research work on (un)sustainable technologies at the Laboratoire d'InfoRmatique en Image et Systèmes d'information » (LIRIS) (Université Lyon1). She is also a member of La Quadrature du Net.

Abstract

Bio

Technopolice is a research-action initiative launched by La Quadrature du Net along with other French human rights groups to document and politicize the developments of so-called "Safe City" projects.

In this paper, we aim to present our latest research, which looked at the implementation of three place-oriented predictive policing technologies: PAVED, a tool developed by the French Gendarmerie; Smart Police, a product sold by a French startup by the name of Edicia to local police forces; M-Pulse, a project once labeled as a "Big Data Observatory for Public Tranquility" developed by the city of Marseille in partnership with the company Engie Solutions. Our research, which ran into the hurdle of administrative opacity, drew on open source materials, a review of the scarce literature currently existing on policing technologies in the French context, a few qualitative interviews with developers and users of these systems, as well as dozens of FOIA requests sent to police forces across the country.

Despite being the object of struggles and negotiations between various actors of the policing field, the evidence we gathered tend to conclude to a general lack of interest by end-users, leading to discontinued experiments and gradual derelictions of these systems whose added-value seems meager to null. That being said, when seen as a testbed for the future platformization of police work and recast in the context of other socio-technical developments in French policing, they represent a worrying precedent considering the lack of proper oversight and transparency, the dubious criminological assumptions they hard-code and conceal, and finally because of the way they can be used to overstep legal boundaries and over-police marginalized populations.

Session 7 Al and Prediction in Policing: Challenges and Future Perspectives

Tuesday 30th 09.15-10.45

fundamental rights.

Chair: Irena Barkane (Room: Aud4 – 4A60, 4th floor)

Title 7.1

## Predictive policing in EU law enforcement policies

(Lund – IT-Pol Denmark)

Keywords Big data, data mining, Europol, EU law enforcement policies

Bio **Jesper Lund** is Chairman of IT-Pol (member of EDRi), a Danish digital rights organisation that works to promote privacy and freedom in the information society and focuses on the interplay of technology, law and politics. He has worked on prediction policing in Denmark (POL-INTEL) since 2016, and participated in EDRi's advovacy work on the revision of the Europol Regulation.

Abstract EU law enforcement policies increasingly rely on the central tenets of the predictive policing paradigm: access to large data sets and algorithmic data-mining analysis. For several years, Europol has received and analysed large data sets without a proper legal basis, which led to EDPS enforcement action in 2019 (and information about Europol's data 'black hole' becoming public). The revision of the Europol Regulation adopted in 2022 retroactively legalises the previously unlawful surveillance of millions of innocent individuals. The new Europol Regulation also allows Europol to leverage its vast databases for research and development (R&D) activities, which includes developing AI tools for law enforcement. This happens with limited safeguards for

The mantra of law enforcement having access to large data sets, and the use of predictive analytics or Al-based tools to analyse these data sets, can also be seen in other recent EU legislative and non-legislative initiatives. This includes the current High Level Expert Group on access to data for effective law enforcement, which was set up in mid 2023 to address Member States' never-ending 'going dark' concerns. In September 2023, investigative journalists reported that Europol had asked for broad and unfiltered access to the large amount of private communications that will be intercepted if the proposed Child Sexual Abuse Regulation (Chat Control) is adopted.

The purpose of the presentation is to give an overview of recent policy initiatives at the EU level that rely on and further entrench the predictive policing paradigm. The presentation will be based on research by European Digital Rights (as civil society organisation), articles and position papers on EU law enforcement policies, an area which generally receives much less attention than e.g. the GDPR, DSA and AI Act.

### 33

Session 7 Al and Prediction in Policing: Challenges and Future Perspectives

Tuesday 30th 09.15-10.45

Chair: Irena Barkane (Room: Aud4 – 4A60, 4th floor)

Title **7.2** 

Potential harms towards the right to a fair trial and the right to privacy by the law enforcement use of AI to handle electronic evidence and the impact of the e-Evidence Regulation

(Eren – Leuven Belgium)

Keywords Right to a fair trial, right to privacy, use of AI by law enforcement, e-evidence

Bio

**Ezgi Eren** is a doctoral researcher at KU Leuven Centre for IT & IP Law (CiTiP). Before joining CiTiP, she worked as a lawyer at a Turkish law firm for two years, following which she was awarded the Chevening Scholarship in 2018 and pursued an LLM at the University of Edinburgh on Innovation, Technology and the Law. At CiTiP, she researches the topic "Legal standards for Al-evidence in cross-border criminal matters", and works in the H2020 project STARLIGHT, focusing on the legal and ethical aspects of the development and use of Al tools by European LEAs.

Abstract

Law Enforcement Agencies (LEAs) have been increasingly developing and relying on tools based on artificial intelligence (AI) to collect, handle and process data more efficiently. For instance, encrypted communications networks were hacked in recent EncroChat investigations, and LEAs obtained vast databases containing communications between suspected criminals. Thanks to machine learning and AI technologies LEAs were able to analyse millions of data points efficiently, and the evidence obtained as a result led to countless arrests all over Europe.

While deploying AI tools to handle evidence has many benefits, scholars have also identified countless challenges inherent to AI technologies, such as lack of transparency and explainability, lack of accountability, unfair and discriminatory outcomes and inaccurate results.

Moreover, due to a lack of regulation concerning the electronic evidence handled by AI and its exchange between different jurisdictions, this type of evidence that is collected in one jurisdiction may be deemed inadmissible before the courts of another. This would hamper the efficiency of criminal proceedings. More importantly, the levels of observation and respect towards fundamental rights differ in each EU Member State, as can be observed from the higher number of fundamental rights violations committed by certain Member States in the cases brought before the ECtHR.

This study hypothesises that in the context of the use of AI tools by LEAs to handle electronic evidence in cross-border criminal proceedings, the above-mentioned challenges of AI can lead to critical harm towards the fundamental rights of the individuals involved in criminal proceedings, especially the right to a fair trial and the right to privacy. After identifying these harms, the study analyses whether and to what extent the recent regulatory developments in the EU concerning electronic evidence, most importantly the new e-Evidence Regulation, provide the necessary safeguards against such harms.

Session 7 Al and Prediction in Policing: Challenges and Future Perspectives

Tuesday 30th 09.15-10.45

Chair: Irena Barkane (Room: Aud4 – 4A60, 4th floor)

Title **7.3** 

# From Police Investigation to Court Verdict: Mass Video Surveillance and AI for Criminal Justice Purposes

(Löfstrand & Backmann – Gothenburg Sweden, & Kruse – Linköping Sweden)

Keywords Video surveillance, criminal justice system, crime investigation, civil rights, AI

**Cecilia Hansen Löfstrand** is an associate professor in Sociology at the University of Gothenburg. Her research concerns policing and surveillance, governance, and the margins of welfare society. She currently leads the research project From police investigation to court verdict: mass surveillance for criminal justice purposes and also participates in the research project Video surveillance recordings and artificial intelligence in crime investigation, both funded by The Swedish Research Council.

**Christel Backman** is an associate professor in Sociology at the University of Gothenburg. Her research examines issues on social control, surveillance, policing, human resource management, privacy and the boundaries between private and public life. She currently leads the research project *Video surveillance recordings and artificial intelligence in crime investigation* and works in the research project *From police investigation to court verdict: mass surveillance for criminal justice purposes*, both funded by The Swedish Research Council.

**Corinna Kruse** is an associate professor in Technology and Social Change at Linköping university. Her research concerns the production and movement of knowledge, in particular forensic evidence. She has researched the Swedish criminal justice system since 2008 and currently leads the research project *Trust and Credibility through Standardization: The Accreditation of Crime Scene Work.* She also participates in the projects *Video surveillance recordings and artificial intelligence in crime investigation* and *From police investigation to court verdict: mass surveillance for criminal justice purposes.* All projects are funded by The Swedish Research Council.

**Abstract** 

Bio

Despite the rapidly increasing scope of video surveillance and AI for criminal justice purposes, surprisingly little is known about when video recordings and AI are useful for solving crimes and how recordings are actively turned into evidence during crime investigation and court proceedings. In a new research project that started in July 2023, we aim to close this gap by a unique ethnographic study in which we accompany and interview criminal justice professionals and follow crime cases as they move through the criminal justice process, from pre-trial investigation to court verdict. Our objective is to generate knowledge about when and how video surveillance recordings and AI are used by the police and in court, determine the usefulness of video surveillance technologies in the process from pre-trial investigation to court verdict, and establish a theoretical framework enabling considerations about the justifiability of mass video surveillance for criminal justice purposes in democratic societies.

In this paper we present our theoretical standpoints, ethnographic design, and preliminary results from the fieldwork regarding police investigative work and how and the materials produced by video surveillance technologies are used and actively turned into evidence by crime investigators.

The future scope of our research project is to contribute knowledge to facilitate decision-making about under what circumstances camera surveillance should be used and how investigation work should be organized. We will move beyond current theoretical debates about the justifiability of mass video surveillance for criminal justice purposes by establishing an empirically grounded theoretical framework for considerations about justifiability of mass video surveillance in democratic societies.

Session 7 Al and Prediction in Policing: Challenges and Future Perspectives

Tuesday 30th 09.15-10.45

Chair: Irena Barkane (Room: Aud4 – 4A60, 4th floor)

Title 7.4

# (Un)predictable futures of policing: A social transformation approach

(Masso & Kasapoglou – Tallin Technology Estonia)

Keywords Predictive policing, social morphogenesis, eye-tracking, story completion, critical data studies

**Anu Masso** is an associate professor of big data in social sciences at Ragnar Nurkse Department of Innovation and Governance, Tallinn University of Technology. Her research focuses on the social consequences of the implementation of data technologies, social transformations and spatial mobilities. She is also known for her work on social science methods and methodologies.

**Tayfun Kasapoglu** is a postdoctoral researcher at Ragnar Nurkse Department of Innovation and Governance, Tallinn University of Technology. His main research interest lays in critical data studies with a focus on perspectives of data subjects that are more likely to be the targets of datafied governance procedures. His current research deals with predictive policing.

Abstract As data collection, analysis, automation, and predictive analytics become increasingly pervasive, it is paramount to comprehend evolving social norms and values about data to anticipate potential futures.

To that end, our study employs three distinct cases and aims to provide insights into the potential futures of data-driven technologies. Our study focuses on predictive policing and uses social morphogenesis as a frame to highlight the significance of social change in understanding the role of technologies that depend on the past data to envision and shape the future. First, we investigate how international students perceive data collection practices when crossing borders through a semi experimental eye tracking study to understand what is perceived as the norm and what raises concerns. Then in our second study, we explore the narratives crafted by students enrolled in critical data studies to understand their expectations from the state and law enforcement's use of predictive technologies.

Finally, we look at the literature on biohacking to shed light on the relationship between changing bodies and social morphogenesis. Biohacking stands at a grey ethical and legal space, providing a compelling exemplar of social change. These discussions underline the importance and challenges of governing and policing evolving bodies and technologies.

Bio

36

#### Session 8.1

Session 8 Emerging Trends in Digital Policing

Tuesday 30th 13.30-15.00

Chair: Tayfun Kasapoglou (Room: 3A12-14 – 3rd floor)

Title 8.1

# DNA as forensic evidence and a commodity: The role of consumer genomics

(Bakken – Oslo Norway)

Keywords Platformization, consumerism, public-private partnership, DNA, innovation

Bio Silje Anderdal Bakken is a postdoctoral researcher at the Department of Criminology and Sociology of Law, University of Oslo. She holds a PhD in Sociology from Copenhagen University, where she looked at the digitalization of social interaction in illegal markets. She is now part of the ERC-project "Digital DNA" led by Mareile Kaufmann that looks at the changing relationships between technology, DNA and evidence. Here her focus is on the consumerization of DNA and its relationship to DNA as police evidence, and possible technological futures of DNA as evidence and what role this has on today's development of the field.

Abstract
For a long time, DNA has been the golden evidence in crime cases. Recent years, DNA has also grown as a commodity. Several commercially driven companies now provide direct-to-consumer genomic testing based on aims like ancestry, entertainment, and medical information. Companies like 23andMe, Ancestry, MyHeritage, and FamilyTree have millions of people worldwide registered in their databanks. These companies play a massive role in today's use and developing of DNA material and related technology. Furtherly, the development of consumer genomics has potentially large impacts on the police's use of DNA as evidence.

My presentation focuses on commercial DNA companies' marketing and promoting of DNA and DNA tests on their websites. Through a detailed netnography of private DNA companies' websites, I map the expressed ideological factors of these companies, in relation to both biology and technology, as well as the website design elements in connecting with the audience. I also include a broader context of external factors such as geographical location and targeted audience. Taken together, ideology, design, and external factors will then be used to discuss commercial companies' impact on DNA research and further innovation in relation to police work and DNA as evidence.

The future scope of this research is to explore the public-private partnership in relation DNA and police. Famously, US police captured the Golden State Killer after several decades due to a distant relative having submitted their DNA to a genealogy database. The police's use of such databases was later questioned. In relation to this is the platformization of digital tools, including databases, such as for DNA.

### Session 8.2

Session 8 Emerging Trends in Digital Policing

Tuesday 30th 13.30-15.00

Chair: Tayfun Kasapoglou (Room: 3A12-14 – 3rd floor)

Title **8.2** 

Scientizing Police Work: Biometric data practices and the creation of anatomic and genomic 'body types'

(Kaufmann & Vestad – Oslo Norway)

Keywords Biometry, data practices, marking, forensics, DNA phenotyping

Bio Mareile Kaufmann's background is in Criminology and Cultural Studies. She is a professor at the Department of Criminology and Sociology of Law, University of Oslo with a research focus on data practices. She works with qualitative research designs that combine theory with innovative angles and strong empirical components. For her work she was allowed to collaborate with intelligence officers, state officials, forensic scientists, software developers, hackers, artists and children. She was awarded several grants and prizes, amongst which is the

ERC-funded project Digital DNA and the University of Oslo's annual Award for Young Researchers.

Maja Vestad, University of Oslo, Department of Criminology and Sociology of Law.

**Abstract** 

The use of biometrics for the creation of visual 'body types' needs continued critical engagement. This paper discusses Lombroso's practice of typing 'born criminals' vis-à-vis new data practices of genomic phenotyping used to identify potential suspects. Both are prevalent examples of scientizing and datafying police work. While Lombroso's types express a deep ontology, using anatomy to explain causes of criminal behavior, phenotyping expresses a flat ontology using genomic and physiognomic correlation to help identifying suspects by making a prediction about their body type. Despite these differences, both forms of visualizing bodies, we argue, are also a practice of marking bodies. Especially in the context of crime control, marking is a highly sensitive practice. It entails the risk of further stigmatising already marginalised segments of the population and opens doors for forms of profiling that are highly political. Due to the role of typing in establishing criminology as a discipline, the analysis is also a critical engagement with the discipline per se.

## **Session 8.3**

Session 8 Emerging Trends in Digital Policing

Tuesday 30th 13.30-15.00

Chair: Tayfun Kasapoglou (Room: 3A12-14 – 3rd floor)

Title 8.3

#### New Risks and Old Forewarnings? The Swedish case of logics and risks in biometric interoperability

(Bredström, Krifors, Mesic – Linköping Sweden)

Keywords Interoperability, EU IT databases, crime prevention, biopolitics, biometrics

Bio Anna Bredström's research is informed by Feminist intersectionality theory, Social medicine and Science and technology studies. Her current research is focusing on how race and ethnicity is constructed through different biotechnologies, including biometrics and human genomic research.

**Karin Krifors**' research concerns migration systems, labour, and new forms of logistical capitalism. She has studied geographies of conviviality and political multiculture and is currently conducting studies on dispersal in refugee reception strategies, effects of algorithmic rellocation of migrants and transformations of logistical towns.

**Nedazd Mešić**'s research concerns migration and integration with particular focus on social inclusion, pedagogy, mobility and the engagements of social movements for precarious migrant workers, newly arrived migrants and migrant youth.

Abstract

Legally sanctioned management of sensitive personal and biometric data in large scale migration and border control EU-databases has rapidly increased in the past decade. The databases include EURODAC, VIS and SIS-II but more are planned, including EES, ETIAS and ECRIS-TCN. Currently, EU-Lisa with its advisory groups of member state representatives, is engaged in technological and organizational developments aiming for easier access to data. Interoperability between the databases, including Europol and Interpol data sources, is in this context framed as the key to effective detection, identification, and prevention of crime and security threats. However, this development where functionalities over time evolve and expand aligns also with a general societal 'securitization' and criminalization of migration more specifically. It is also conducive to the normalization of risks, such as those of built-in 'function creeps', which researchers had articulated long prior to the current developments.

We have previously argued for further exploration of ethical and biopolitical consequences of this development (Bredström, Krifors and Mešić 2022). In this paper, we do so by identifying inherent logics and anticipated risks as articulated in expert discourses concerning the contemporary Swedish technological developments; the expanded use of biometrics; and the organisational implementation of interoperability. The analysis is based on perspectives provided in interviews with migration and law enforcement authorities, data protection experts, lawyers, and NGOs, and on studies of two investigations initiated by the Swedish Government, focusing Biometrics in law enforcement (SOU 2023:32) and Interoperability between EU Information systems in the fields of police and judicial cooperation, asylum and migration, borders and visa (Ds 2022:21).

Session 9 Ethical and Legal Considerations in Predictive Policing

Tuesday 30th 13.30-15.00

Chair: Pernille Skjevrak (Room: ScrollBar – oE01)

Title 9.1

#### The Ethics of Predictive Policing

(Hadjimattheou – Essex UK & Nathan – Trilateral Research UK)

Keywords Ethics. Predictive policing. Autonomy. Discrimination. Bias

**Kat Hadjimatheou** is a Senior Lecturer in Criminology and Ethics at the University of Essex, UK. She is interested in the ethical issues around police uses of data and technology, crimes of abuse, and undercover policing. She is a member of the National Crime Agency's Independent Advisory Group on Ethics and in 2023 helped draft the new Code of Police Ethics for England and Wales.

**Chris Nathan** is a Senior Research Analyst at Trilateral Research and an Honorary Research Fellow at the University of Warwick's Interdisciplinary Ethics Research Group. He is an expert on police ethics and the author of many articles on policing and political theory as well as the 2022 book *The Ethics of Undercover Policing*.

**Abstract** 

Bio

All decision-making, whether individual or institutional, involves some kind of prediction. The criminal justice system is no exception. Police routinely make predictions about which kinds of crimes are likely to be committed, where, and by whom. Predictive policing departs from mundane and routine police approaches to assessing the riskiness of places and people by using complex data-analysis tools, algorithms, and empirical research to formulate and validate predictions.

In this paper we deploy the tools of applied moral philosophy to explore and discuss three kinds of ethical issue this raises. Three key areas of ethical concern are discussed. These relate to the tendency of predictive policing to: exacerbate the discriminatory and disproportionate policing of the urban poor and racial minorities by replicating and amplifying existing police bias and prejudice; impose criminal suspicion and restrictions to liberty on individuals in the absence of sufficient grounds for doing so, thus violating autonomy or otherwise disrespecting individuals; and reduce transparency and accountability in policing by introducing proprietorial secrecy and false objectivity through a veneer of scientific reliability into the policing decision-making process. In what follows, we focus on the first two of these concerns and touch briefly on the issue of accountability and transparency. None of the negative outcomes and harms we discuss is a necessary consequence of predictive policing. Nonetheless, there are good reasons to institute ways to counteract these effects in a proactive way. We close with a call for systems that put the moral dangers of predictive policing in the open and provide transparent ways for showing how far they are actually being addressed.

Session 9 **Ethical and Legal Considerations in Predictive Policing** 

Tuesday 30th 13.30-15.00

Chair: Pernille Skjevrak (Room: ScrollBar – oE01)

Title 9.2

> The Role of the EU Artificial Intelligence Act in Addressing the Fundamental Rights Risks of Digital Surveillance and Predictive Policing

(Barkane – University of Latvia)

EU Artificial Intelligence Act, Fundamental Rights, remote biometric identification, predictive policing, Keywords prohibited AI practices, preventing mass surveillance

> Dr.iur. Irena Barkane is a researcher and lecturer at the Faculty of Law, University of Latvia. Her research interests cover artificial intelligence regulation, law and technology, EU law, human rights, data protection and privacy. She was a member of the UNESCO Ad Hoc Expert Group for the elaboration of the Recommendation on the Ethics of Artificial Intelligence.

Digital surveillance and predictive policing technologies have increasingly being used by law enforcement authorities in Europe and all around the world raising major concerns about their impact on fundamental rights, the rule of law and democracy. Facial recognition technology and other biometric surveillance systems can affect a wide range of fundamental rights – from human dignity, the right to privacy and data protection, to non-discrimination and freedom of expression –, as well as lead to mass surveillance.

International and European organizations are actively looking for the possible ways to regulate AI systems to prevent and mitigate their risks. On 21 April 2021, the European Commission published a proposal for the Artificial Intelligence Act (the AI Act) which acknowledges that some AI practices, such as the use of "real-time" remote biometric identification systems in publicly accessible spaces for the purpose of law enforcement, should be prohibited. However, this prohibition is very limited, provides an exhaustive list of exceptional cases and would allow a wide range of surveillance practices. In June 2023, MEPs adopted European Parliaments negotiating position on the AI Act expanding the list to include bans on intrusive and discriminatory uses of AI, such as biometric categorization systems using sensitive characteristics, emotion recognition systems and predictive policing systems. Biometric surveillance continues to be a critical point of contention in the negotiations of the AI Act at the final phase of the EU legislative process.

The paper will reveal what main risks AI-powered surveillance and predictive policing systems used by law enforcement authorities pose to fundamental rights. Further, it will examine whether the EU AI Act would prevent the risks of harm to the fundamental rights raised by biometric surveillance and predictive policing systems.

Bio

Abstract

Session 9 Ethical and Legal Considerations in Predictive Policing

Tuesday 30th 13.30-15.00

Chair: Pernille Skjevrak (Room: ScrollBar – oE01)

Title

## 9.3 Legal challenges of LEA deployment of AI to predict crime

(Pisaric - Novi Sad Serbia)

Keywords Predictive policing, AI, human rights

Milana Pisarić graduated from the Faculty of Law, University of Novi Sad in 2007, where she defended master's thesis "Illegal evidence in criminal proceedings" in 2010. She defended doctoral dissertation "Specifics of proving cybercrime" at the Faculty of Law of the University of Belgrade in 2016. She is working at the University of Novi Sad since 2008, and as Assistant Professor since 2023.

Field of scientific interest: criminal procedure, evidence, electronic evidence, criminalistics, digital forensics, cybercrime. She is the author of several dozens of scientific and professional papers, and one monograph. She participated in numerous scientific and professional conferences.

**Abstract** 

Bio

Police deploy data mining and profiling techniques to investigate crime, and criminal intelligence analysis is regarded as a legitimate means for establishing a proactive response to crime. Sci-fi books and movies have already provided a realistic portrait of the capabilities that predictive algorithms can deliver to LEA, but rapid advances in the last few years in AI may enable the establishment of Minority Report's Precrime platform in a very near future.

A significant interest in AI deployment by LEA is evident. Some of the tools and services for predictive policing based on AI use are designed in-house, the others are procured from private entities. As public-private partnerships are fostered, great budgetary expanses are being forwarded to research projects, and used to buy data and surveillance technologies. There are several companies that offer LEA products and services for data collection and management, with various features relying on AI in order to predict criminal activities.

The inherent secrecy of police work does not preclude a question of the legitimacy and legality of LEA activities based on the use of such tools and services, especially with regard to their black-box nature. Beside human rights concerns related to digital policing, the question is whether (and to what extent) predictive algorithms could be trusted, since they are criticized as unclear, unreliable, and even unconstitutional. The other is the issue of transparency and accountability, especially with regard to proprietary rights and know-how of non-transparent tools and services for predictive policing. Also, we must not lose sight of the sometimes shady elements of the process of procurement, deployment and control over these tools. The author will stress out the legal concerns that swirl around LEA using predictive technology based on AI, particularly the one provided by the private sector, which should be under greater legal scrutiny.

Session 9 Ethical and Legal Considerations in Predictive Policing

Tuesday 30th 13.30-15.00

Chair: Pernille Skjevrak (Room: ScrollBar – oE01)

Title **9.4** 

#### Digitizing caste: Criminal databases and policing in India

(Sovanane – CPA project India)

Keywords Caste, data, policing, India

Bio Nikita Sonavane, Mrinalini Ravindranath, Sanjana Meshram

All authors are members of the Criminal Justice and Police Accountability Project (CPA Project) – litigation and research organisation that uses empirical data to underscore patterns of everyday casteist policing the targeting of criminalised oppressed castes and tribes in India.

**Abstract** 

In 2009, the Indian government launched the Crime and Criminal Tracking Network & Systems (CCTNS) with the aim of integrating and making publicly accessible all the data and records of crime by the police. With CCTNS, the State Police departments across the country found an opportunity to digitise this data, link it to a common database accessible across the State, and extend its use to crime and criminal mapping and predictive policing. A decade later an upgrade on the CCTNS was envisioned in the form of the Interoperable Criminal Justice System (ICJS), which will integrate existing centralised databases the CCTNS, e-prisons, and e-courts, promising "seamless exchange of live data" among these branches. Mainstream critiques of this exercise have hinged on the privacy implications of such a move. These critiques of digitisation have not paid attention to the casteist origins of datafication — and the place of caste in the construction of these databases. The IT hub city of Hyderabad, considered the benchmark for tech policing in India, lies at the heart of this process of digital datafication by the police through the seemingly neutral administrative category of 'habitual offenders' (HOs). Comprising Denotified Tribes (DNTs) i.e nomadic and semi-nomadic communities deemed as 'hereditary criminals' by the British through the Criminal Tribes Act (CTA), 1871.

Through an empirical study of Hyderabad this article will trace the creation of digital criminal databases in India. In doing so, we historicise and contextualise the process of datafication through linkages between caste and policing through the colonial CTA. Through this project, we hope to demonstrate and build on how digital datafication is as an attempt to obfuscate and entrench the gaze of what we refer to as 'the digital caste panopticon' over oppressed caste communities through the tech neutrality.

Session 10 Shifts in Organisational Culture and Police Work

Tuesday 30th 13.30-15.00

Chair: Emils Kilis (Room: 3A54 – 3rd floor)

Title **10.1** 

## Forensic Reconstruction and the Digitalization of Evidence Management

(Wood – UCLA USA)

Keywords Forensic science, platformization, crime scene reconstruction

Bio Stacy E. Wood is the Director of Research and Programming for the UCLA Center for Critical Internet Inquiry.

She completed her MLIS and PhD in Information Studies with a focus on Archival Studies at UCLA. Her work focuses on the intersections between technology, recordkeeping and cultures of evidence. Before returning to UCLA she was a founding faculty member of the School of Computing and Information at the University of

Pittsburgh.

Abstract The speed of technological development vastly outpaces the legislative and regulatory structures designed to assess and manage emergent technology with regards to public safety, civil rights and social justice. Widely

discussed examples of technologically facilitated and/or mediated racial and gender bias as well as wholesale failures across the United States criminal legal system are frequent, ranging from surveillance technologies deployed by law enforcement to algorithmically assisted decision-making in the courts. Research in this area confronts a series of barriers including difficulties in accessing proprietary technologies and a criminal legal

system often hostile to efforts regarding transparency and accountability.

Session 10 Shifts in Organisational Culture and Police Work

Tuesday 30th 13.30-15.00

Chair: Emils Kilis (Room: 3A54 – 3rd floor)

Title **10.2** 

#### Resisting digital policing practices: A participatory approach

(Efthymiou – Tampere Finland)

Keywords Computer vision, counter-surveillance, digital policing, PAR, human rights

Bio **Yannis Efthymiou** is a software developer. He has a background in statistics and social sciences research. He has collaborated in various EU projects as a researcher with a focus on technology and its social implications. He has also worked with several universities in Europe and Greece as data scientist on projects leveraging big data and looking into the consequences of datafication of modern societies. Finally he's been employed in the industry as software engineer working on state-of-the-art web development stack.

**Abstract** 

This research project seeks to contribute to the understanding of the ethical, legal, and social implications of machine learning technologies in digital policing and surveillance practices. In particular, it aims at developing a Participatory Research Approach (PAR) that engages community organizations and stakeholders who are mostly affected by the use of pervasive digital systems in order to understand and examine the framework under which such surveillance apparatuses are situated. This engagement is planned to lead also to the development and deployment of a software application which will be leveraging AI machine vision technologies in order to detect diffused surveillance technologies in urban settings. By blending PAR with modern software development we hope to create a more nuanced understanding of the challenges and opportunities presented by these technologies for protecting human rights and advocate democratic values.

Therefore this research draws on both computer science and social science perspectives, utilizing machine learning techniques to analyze and interpret data which will be in part co-produced with communities. At the same time from a critical perspective this project looks into the implications of these technologies for highly digitized societies. Collaborative field research will be the main tool for mapping surveillance technologies in three Scandinavian cities (Copenhagen, Malmö, Helsinki). Critical review of relevant state policies and regulations will aim at unveiling the logic behind such deployed machines and the underlying digital policing practices in public space.

The overarching intention of this project is to develop a collaborative framework and a practical tool for resisting such practices. In order to broaden the understanding of machine learning technologies, their development and their deployment and at the same time contribute to the discussion of how such technologies could be used for empowerment, transparency and greater accountability.

Session 10 Shifts in Organisational Culture and Police Work

Tuesday 30th 13.30-15.00

Chair: Emils Kilis (Room: 3A54 – 3rd floor)

Title **10.3** 

## Choosing Predictive Communications in the Dutch National Police

(Young – Erasmus Rotterdam Netherlands)

Keywords Prediction; communication systems; artificial intelligence; ethics; choice

Bio **Sarah Young** is a Postdoctoral Researcher in Digitalization and AI at Erasmus University Rotterdam. She researches technical communication in organizations, particularly concerning AI and technologies that can facilitate surveillance. She previously worked for eleven years as an investigator for the United States Office of Personnel Management's Federal Investigative Service, and this experience impacts her research on the

human element of working with technology.

(see UNICJRI, 2019).

As established by the premise of this conference, data-driven tools in policing are not new. But while predictive imaginations often involve statistics and crime, it is also useful to consider other ways that law enforcement is engaged in using artificial intelligence and predictive capabilities. An especially generative space are communication AI programs which utilize AI and prediction, but whose function can be viewed more along the lines of customer service than more intrusive processes of prediction, recognition, or exploration

Based on this premise, this presentation will look at an example from the Dutch National Police and their development of a communications tool using AI to help predict where fraud calls should best be routed and/or whose calls would best be answered through human intervention. Drawing from a series of interviews conducted with law enforcement during the pandemic, this presentation ultimately argues that the Dutch police's use of predictive technologies supports that not only are predictive technologies diverse, but, while complicated, law enforcement agencies themselves can be concerned about their ethical and just use. While future work in this area would look at where more communication systems are used and why departments beyond the Dutch context would see these spaces as fit for their use, this presentation offers a useful touchpoint for a diverse example of technology use.

#### 46

Session 10 Shifts in Organisational Culture and Police Work

Tuesday 30th 13.30-15.00

Chair: Emils Kilis (Room: 3A54 – 3rd floor)

Title **10.4** 

#### Predictive Policing: Challenges from South America

(Garcia Campo – Oxford UK & Rochow – Irvine USA)

Keywords Predictive Policing – New Technologies – Global North – South America

Gonzalo García-Campo is a PhD candidate at the Centre for Criminology of the University of Oxford. He has a Bachelor's Degree in Legal and Social Sciences from the University of Chile and holds an LLM from the London School of Economics and Political Science. His research interests relate to police violence, police discretion, and structural discrimination, with a particular focus on the Latin American reality. His dissertation project seeks to disentangle the meanings of the idea of Democratic Policing and its impacts on police institutional designs, using Chile as a study case.

**Diego Rochow** is a PhD student at the Department of Criminology, Law and Society at University of California, Irvine. He has a Bachelor's Degree in Legal and Social Sciences from the University of Chile and an MA in Social Ecology from the University of California, Irvine. His research interests link to the functioning of criminal justice organizations and the use of new technologies in Latin American penal agencies. His research projects also address criminalization processes against migrant populations and the citizenship rights of people in prison.

Abstract

Bio

In recent times, law enforcement agencies have increasingly integrated big data and digital systems for crime forecasting into their daily operations, an advancement that scholarship has termed *predictive policing*. Stakeholders, scholars, and political authorities have endorsed these tools, highlighting their potential to improve operational and organizational efficiency within police forces. On the other hand, critics have suggested that predictive policing instruments exacerbate police biases and discriminatory practices, thereby amplifying the harmful impacts of law enforcement on marginalized groups. Further, the actual effects of predictive policing remain shrouded in uncertainty, casting doubt on its alleged benefits. These debates on digitalization strategies within police bodies have predominantly unfolded in the U.S. and the U.K.

Against this backdrop, our study aims to provide a fresh perspective on predictive policing research by examining the experiences of the two South American nations that have introduced this technique into their functioning structure: Chile and Uruguay. Through documentary analysis and an extensive literature review, we show the nuances and specifics that have characterized the adoption of digital predictive tools within these countries' police forces. Our research sheds light on both disparities and commonalities between these cases and the developments of the 'Global North,' particularly in the U.S. context. Primarily characterized as an exploratory analysis, this paper underscores some of the promises associated with technological interventions within the South American policing sphere and the Latin American one, in broader terms, while also revealing the risks they entail. Ultimately, we posit that this regional landscape offers ample opportunities to better understand the relevance of local contexts in the ongoing development of predictive policing on a global scale.



Critical Understanding of Predictive Policing