Predicting Problems?
Big data, algorithms and underlying issues

Recognising Knowledge to reduce crime and injustice – Models for successful policing

The role of algorithms

Big data analysis are used to

- influence consumers

- identify social problems

- predict of economic and political decisions

- and possibly crime

- …

The panel

- Mia-Maria Magnusson (Sweden): *Mapping open drug scenes to respond to and predict hot spots of crime and vulnerability*

- Felix Bode (Germany): *Project SKALA – Predictive Policing in North Rhine-Westphalia*

- Colin Rogers (UK/Australia): *Algorithm based policing and the risk of disproportionate police activity*

- Bernhard Frevel (Germany): *From intelligence led policing towards predictive policing? – The risks*

From intelligence led policing towards predictive policing? – The risks

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Theoretical basis of Predictive Policing

- Repeat victimisation
- Routine activity approach
- Rational choice theory
- Boost hypothesis
- Flag hypothesis
- Near repeat victimisation

Empirical basis of Predictive Policing

PP is probability calculation e.g. based on

- criminal incidents
- citizens' reports about conspicuities
- spatial and settlement structure
- socio-demographic, socio-economic and socio-cultural structure and development
- information about offenders (groups)

(desired) Advantages of Predictive Policing

- Objectively and rationally
- Prevention of crime
- Efficient policing with uniformed and plain clothed officers
- Higher clearance rate
- Reduced crime rate

(possible) risks of Predictive Policing

- Stereotyping of victims and offenders
- Stigmatisation of neighbourhoods and their inhabitants, and also offender (groups)
- Social, racial and ethnic profiling
- Blind spots
- Manifestation of social inequality
- Changes in discourse about risks and safety
- Big data aggregate numerous individual data – which can be (partially) re-individualised

(possible) risks of Big Data

- Big data leads to totally transparent citizens
- Loss of privacy rights
- Loss of freedom by hope for growing safety
- Securitization
- Hollowing out the rule of law
- Combination of predictive policing data and other information (facial recognition etc.) are basis for a „1984"-scenario
- Misuse by statutory agencies possible

The new reality (in China)

- "Police Cloud" system is designed to track and predict the activities of activists, dissidents and ethnic minorities, including those authorities say have 'extreme thoughts', among other functions (HRW 2017) -> "social scoring" .

- Police cloud combines the PP-data with personal information such as medical history, delivery records, hotel bookings, IP- and telephone records…

Human Rights Watch conclusion

‚Preventing crime is a legitimate state interest, but predictive tools often point to the same old patterns, making it likely for policing to replicate old mistakes or bias such as targeting of people of lower socioeconomic status. This throws into doubt whether the use of these predictive tools adds much new, and whether the are a necessary or proportionate intrusion on the rights of individuals'.

https://www.hrw.org/news/2017/11/19/china-police-big-data-systems-violate-privacy-target-dissent

The one old warning…

Benjamin Franklin

(1706-1790)

'Those who would give up essential liberty, to purchase a little temporary safety, deserve neither liberty nor safety.'

… and the other