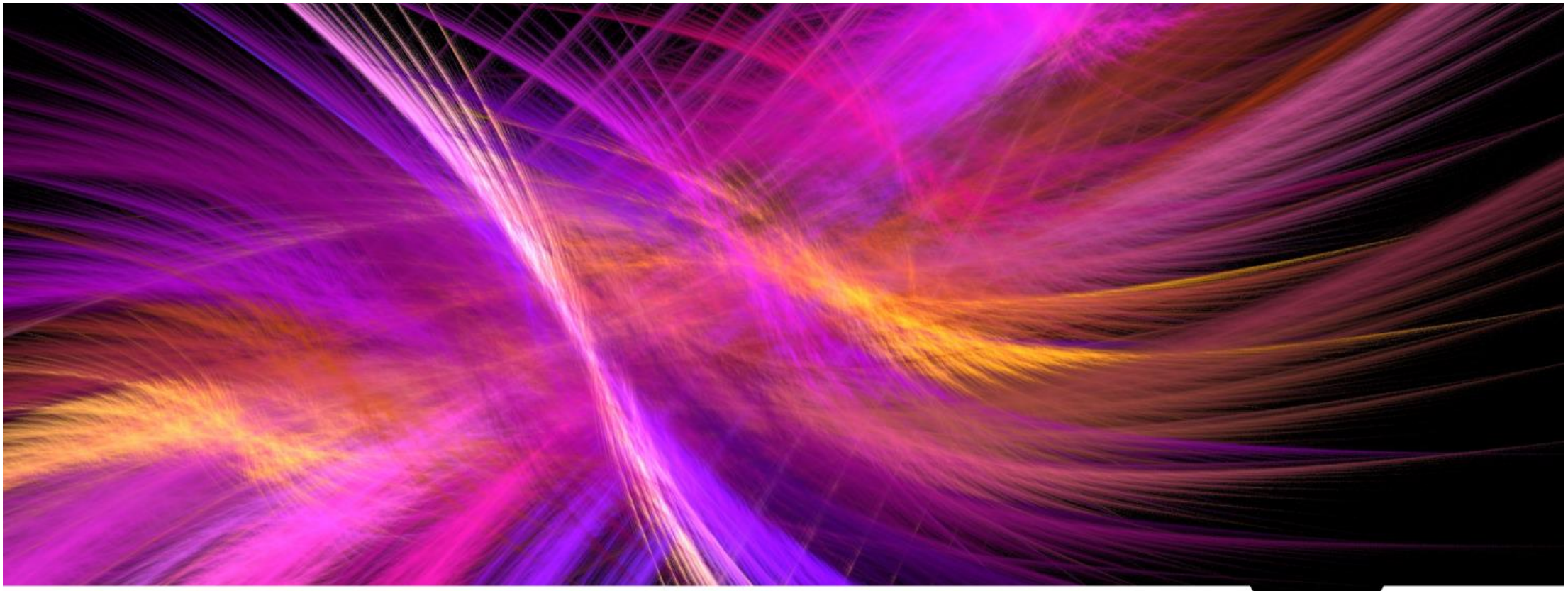

Surveillance Technologies: efficiency, human rights, ethics

Prof. Dr. Tom Sorell, University of Warwick, UK

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Outline

- How does one justify the use by police of surveillance technology in a liberal democracy?
- Legitimate purpose and effectiveness
- SURVEILLE methodology for weighing relevant considerations
  - Effectiveness scores
  - Fundamental human rights score
  - Ethics indicators
- Illustrations
- SURVEILLE methodology (over-) emphasizes privacy violations:
  - Bulk collection

Surveillance technology

- Cameras
- Bugs
- Telephone taps
- Automatic Number Plate Recognition
- Location Tracking
- Drag-netting and data-mining
- Personal communications data collection and analytics?
  - Evidence-based target selection and “hops”
  - profiling

Justifying the use of surveillance technologies in a liberal democracy

- State's special responsibility for security, especially threats to life
- Risks of intrusion, error, and to trust, can be justified in investigation and prevention of serious crime if morally proportionate
- Discretion and secrecy as relaxing the observance of proportionality in practice

Legitimate purposes

- Preventing any crime
  - Preventing serious crime
    - Terrorist attack
    - Murder
    - Money laundering
  - Preventing parking offences
- Achieving fair access to public services
  - Local education
  - Local health services
- Protecting people exercising right to express unpopular views
- Lawful commercial gain

Targeted vs general and inclusive surveillance

- Targeting things and places vs targeting people
- Targeting people for minor offences
- Difficulties:
  - Normal vs abnormal behaviour
  - Discriminatory profiling
- Inclusive camera surveillance
- Communications data collection and analytics

Methodology 1

- What is the purpose?
- Is it legitimate? If yes,
  - What is the technology?
    - Is it legal to use?
    - Is it effective/usable on a scale of 0-10

Components of usability

- Effectiveness
  - Delivery – useful outcome for selected purpose
  - Simplicity – ease of use
  - Sensitivity – accuracy and clarity
- Money cost
- Privacy-by-design
- Overall effectiveness

Methodology 2

- What is its fundamental rights impact?
  - What are the type of circumstances of the technology application?
  - Does the use of that technology in those circumstances compromise an important right? Using a scale of 1(low rights intrusion)-16 (high intrusion)
  - Is the judgement of compromise reliable?
  - Multiply usability score by impact score
- Ethical considerations enter where usability score X h-r impact score does not rule out a technology-in-a-context

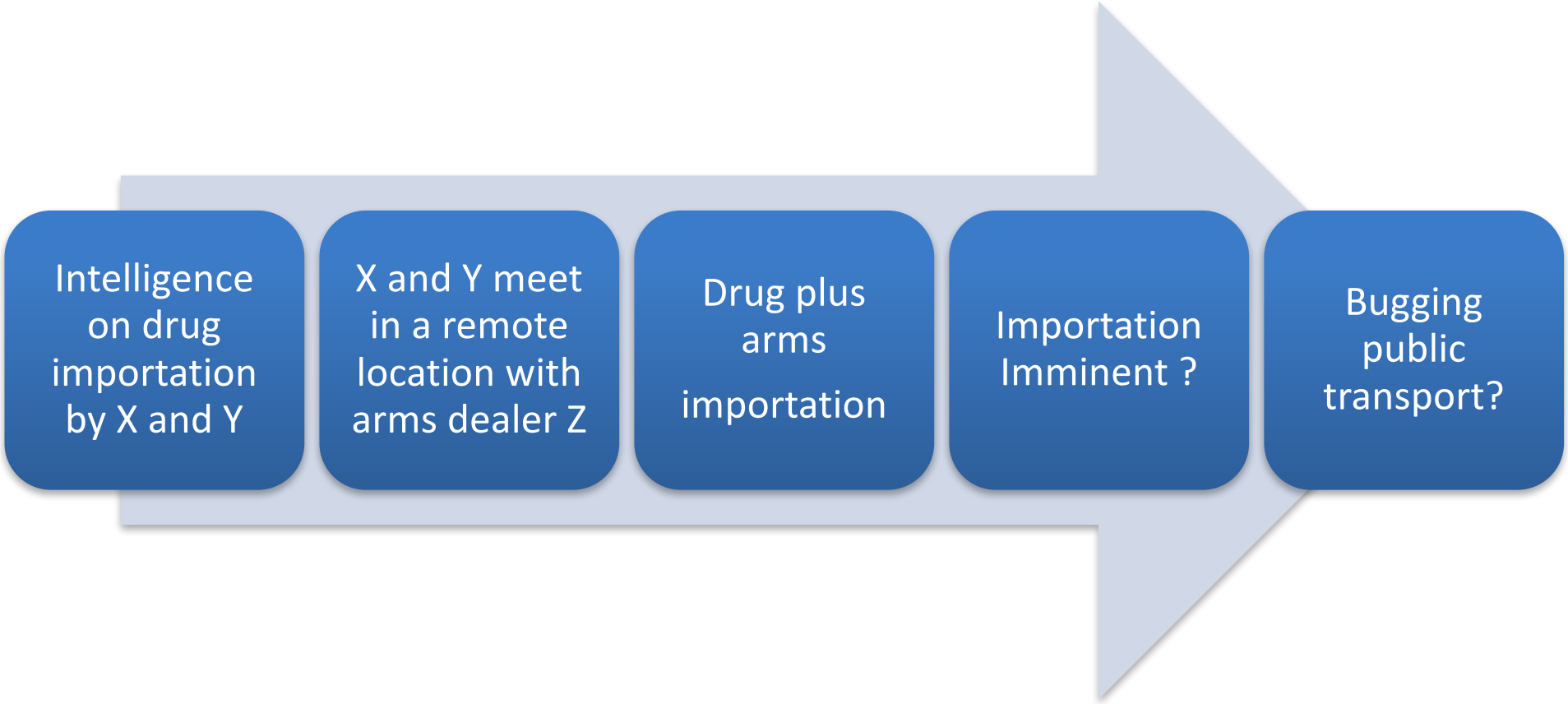
Usable technology with low h-r impact

- Here is where *ethics* comes in
- Ethics provides reasons for and against technology applications for legitimate purposes based on moral theories used in moral philosophy

Examples of Ethics

Outcome of assessment	Organized Crime Investigation	Terrorism prevention scenario	Urban security scenario
Acceptable forms of surveillance	Overt use of CCTV in pubic space Automated detection of explosives or drugs	Checking suitcases of trans-border travelers. Human observation of suspects	Overt use of smart CCTV in public space Automatic number plate recognition
Questionable forms of surveillance	Covert photography in public space	Social network analysis based on social media	Video camera mounted on drone
Impermissible forms of surveillance	Covert listening device in public transport Covert listening device in a suspect's home	Interception of all trans-border telecommunications	Sharing CCTV images between private businesses

Serious crime scenario



The Serious Crime Matrix

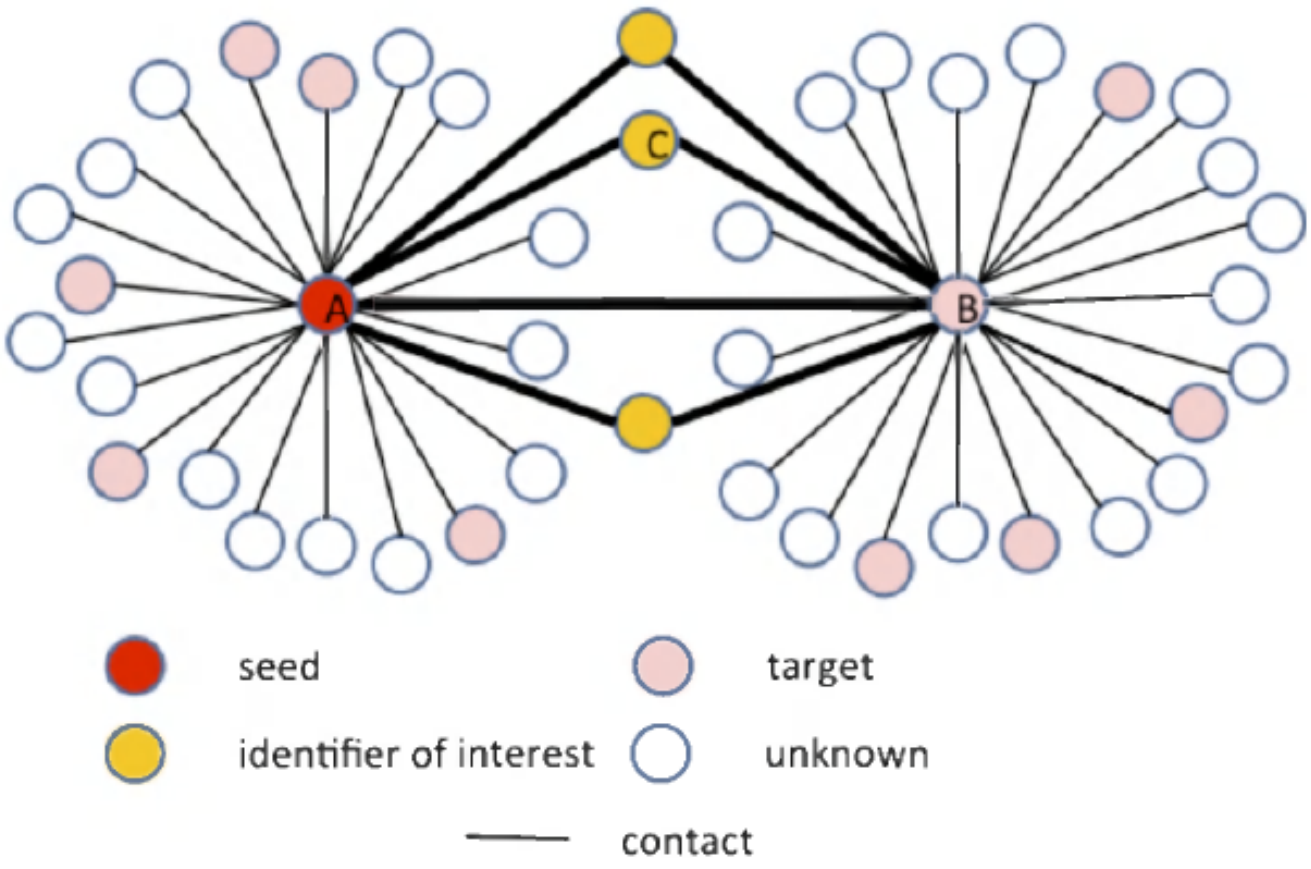
Matrix							
		HUMAN RIGHTS AND ETHICAL ISSUES					
		Moral risk of error leading to significant sanction	Fundamental right to protection of personal data	Fundamental right to privacy or private and family life (not including data protection)	Fundamental right to freedom of thought, conscience and religion	Freedom of movement and residence	Moral risk of damage to trust and chilling effect
TECHNOLOGY AND USE	USABILITY			Moral risk of Intrusion			
1. Visual spectrum dome–zoom, tilt, rotate (public place – used overtly)	6		2	1			
2. Visual spectrum dome–zoom, tilt, rotate (public place – used covertly)	7		8*	2			

3. Covert photography in public place	9		8*	2			
4. Sound recording bug in target's home address.	8		16*	16*			
5. Sound recording bug in target's vehicle.	8		8	6-12			
6. Sound recording bug on public transport used by target.	3		8*	¾*			
7. Sound recording bug in police vehicle transporting target following arrest.	4		8	2			

8. Sound recording bug in target's prison cell.	5		8	4-8			
9. Video camera mounted on platform micro helicopter	6		¾	4-8*		3	
10. AIS ship location detection and identification	5		0	0			
11. Explosives detection near harbor	4			0-¾			
12. Gas chromatography drugs detector	8			0-¾			
13. Whole body scanner eqo	6		0	3			
14. Luggage screening technology	7			0-¾			

15. money laundering technology	7		8	8	1 ½		
16. Networked data analysis	7		3	2			
17. Data transfer analysis (name recognition) technology	6		8	8	1 ½		
18. Location tracking of cellular phones	7		6	6		2	
19. Mobile phone tap	8		3	8*			

Meta-data and Telephone chaining



Ethical Issues

- Does bulk collection violate privacy?
  - Meta-data vs content
  - Collection vs inspection
    - Human inspection vs machine inspection
    - Network analysis produces patterns
    - Content would be overwhelming
    - Processing of personal information but not as intrusive in the sense of engaging with the value of privacy
- Does bulk collection count as mass surveillance?
  - http://www.thenation.com/article/174746/modern-day-stasi-state

Genuine ethical issues

- Secrecy of bulk collection
- Difficulty of democratic oversight
- Difficulty of monitoring data storage
- Risks of data loss

Contact

- t.sorell@warwick.ac.uk
- SURVEILLE materials:
- https://surveille.eui.eu/