

Privacy and the Ethical Design of Surveillance

Michael Nagenborg
Karlsruhe / Germany

Privacy from an Intercultural and Interdisciplinary Perspective

Workshop, February 10-11, 2006

Centre for Interdisciplinary Research
University of Bielefeld, Germany

Privacy from an Intercultural and Interdisciplinary Perspective

- Michael Nagenborg: The Private-Public Dichotomy
- Vincent C. Müller: If You Had Nothing to Hide, Would You Still Mind Being Watched by Machines?
- Philip Brey: Operationalizing Privacy
- Nadia Caidi: Privacy Post 9/11 - Perspectives from Canadian Muslims

Privacy from an Intercultural and Interdisciplinary Perspective

- Nuala Connolly: A Review of The Impact of Modern Identity Infrastructures
- Charles Raab: Privacy from a Public Policy Perspective
- Hansjürgen Garstka: Privacy and Data Protection from a European Perspective
- Kwang-Suk Lee: Surveillant Institutional Eyes in South Korea: From the Disciplines to a Digital Grid of Controls

Privacy from an Intercultural and Interdisciplinary Perspective

- Gordana Dodig-Crnkovic: Privacy and Protection of Personal Integrity in the Working Place
- Marc Langheinrich: Privacy Implications of Ubiquitous Computing
- Jessica Heesen: Privacy in Context-Aware and Mobile Applications of Information Technology
- Ricarda Drüeke & Axel Schulz: Mobile ICT and its Impact on Privacy in Cities and Public Spaces

Privacy from an Intercultural and Interdisciplinary Perspective

- Karsten Weber: The Next Step - Privacy Invasions by ICT Implants for the Human Body
- David J. Phillips: Knowing Glances - Case Studies in Surveillance Infrastructures
- Charles Ess: **Ethical Pluralism and Global Information Ethics**

Privacy as a Human Right

Article 12 of the

Universal Declaration of Human Rights (1948):

“No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.”

Privacy-Laws in Europe

In Europe private information is covered by

- an European Commission Directive on Data Protection 1995,***
- a European Commission Directive on Electronic Data 2002 and***
- differing domestic acts.***

The problem:

James Whitman (2004):

"In every corner of the western world, writers proclaim 'privacy' as a supremely important human good, as a value somehow at the core of what makes life worth living.... At the same time honest advocates of privacy protection are forced to admit that the concept of privacy is embarrassingly difficult to define."

The problem with *informational privacy*

Samuel D. Warren / Louis D. Brandeis (1890):

“The right to privacy”

=

„the right to be let alone“ or

„being free from intrusion“

The problem with *informational privacy*

Heesen:

„However, open and individualised interaction with information and communication technologies often stands in opposition to the right of the individual to privacy and informational self-determination.“

One is not alone in cyberspace.

-> control theories of privacy (Tavani 1999), i. e. Lessig (2002)

Future perspectives:

- **Privacy should not be reduced to informational privacy (Nagenborg 2005).**
- **Privacy is not only to be considered as a value to the individual.**
- **We need an operationalized notion of privacy and that can be used in the development of considered moral judgments in *specific* cases. (Brey)**
- **Privacy itself is not perhaps the main object of study. (Raab)**

Privacy as a value

„Privacy is a room of safety and leisure. Only in the safe space of individual reflection and introspection can spontaneous, natural behaviour be developed, which is a part of the term freedom of action.“ (Heesen)

Privacy as a value

Westin (1967):

- Privacy is important to our personal autonomy and our ability to avoid being manipulated by others.
- Privacy can act as an emotional release from the tensions and anxieties of social life.
- Privacy is important to self-evaluation. As we integrate experience and assert individuality, we require privacy.
- Privacy is important to limited and protected communication, which involves setting boundaries and protecting ourselves.

Privacy as a value

Privacy and Democracy (Dodig-Crnkovic):

“According to Rosen (2000), privacy has political, social and personal values and costs. The political value involves the fact that there is no need to reveal one’s rank or family background, to be able to interact with others in a democracy. Thanks to privacy, it is possible for citizens, who might disagree on a topic, to communicate with each other without needing to reveal the details of their identity. Privacy reaches beyond individual benefit by being a value which contributes to the broader good, becoming an essential element of democracy (Grodzinsky and Tavani, 2004).”

P. Brey: Operationalizing Privacy

- ***Privacy can be defined in terms of the right of persons to control access to their personal affairs.***
- ***Five basic kinds of private affairs, with corresponding rights to privacy:***
 - (i) the human body***
 - (ii) personal spaces and objects***
 - (iii) bearers of personal information***
 - (iv) individual conduct and***
 - (v) social conduct.***

P. Brey: Operationalizing Privacy

Three kinds of privacy intrusions:

(1) unauthorized cognitive access

(snooping and exposure)

(2) unauthorized physical access (disturbances)

(3) informed control

(control over a private affair or broader aspects of a person's life, "surveillance")

P. Brey: Operationalizing Privacy

Example:

“Bearers of personal information are media that contain information about aspects of a person”

-> Some Robots will be “Bearer of personal information”,

i. E. biometric information for 'recognising' people.

Physiological and behavioral characteristics used by biometrics:

- Physiological:
 - Face recognition
 - Facial thermogram
 - Fingerprint recognition
 - Hand geometry
 - Iris scanning
 - Retinal scanning
 - Vein checking
- Behavioural:
 - Gait recognition
 - Keystroke analysis
 - Mouse dynamics
 - Signature analysis
 - Voice verification

(Taken from Furnell, Clarke 2005)

P. Brey: Operationalizing Privacy

Bearers of personal information

*"... may be the subject of unauthorized physical access, resulting in disturbances if they are mishandled, but it is their cognitive function that is most important here: **cognitive access to them may also provide cognitive access to aspects of someone's private life**, and may offer concomitant possibilities for informed control."*

-> data security is not only required to prevent identity theft, but also for protecting privacy.

P. Brey: Operationalizing Privacy

Problem:

Personally owed robots may become bearer of personal information not only from their owner.

Ethical Design of Surveillance

Surveillance may be understood as ...

- a set of processes of
 - Identification,
 - Tracking,
 - Analysis and
 - Response which
- organize social knowledge, social relations, and social power. (David Philipps)

Ethical Design of Surveillance

- **We need an operationalized notion of privacy and that can be used in the development of considered moral judgments in *specific* cases. (Brey)**
- **Mass surveillance vs. Community tools based on surveillance. (This is not a post-privacy discourse.)**
- **Studies: Lyon 2001, 2003; Ball and Webster 2003; Marx 2002; Sewell and Barker 2001 ...**

Physiological and behavioral characteristics used by biometrics:

- Physiological:
 - Face recognition
 - Facial thermogram
 - Fingerprint recognition
 - Hand geometry
 - Iris scanning
 - Retinal scanning
 - Vein checking
- Behavioural:
 - Gait recognition
 - Keystroke analysis
 - Mouse dynamics
 - Signature analysis
 - Voice verification

(Taken from Furnell, Clarke 2005)

Physiological and behavioral characteristics used by biometrics:

- Physiological:
 - Face recognition
 - Facial thermogram
 - Fingerprint recognition
 - Hand geometry
 - Iris scanning
 - Retinal scanning
 - Vein checking
- Behavioural:
 - Gait recognition
 - Keystroke analysis
 - Mouse dynamics
 - Signature analysis
 - Voice verification

(Taken from Furnell, Clarke 2005)

Ethical Design of Surveillance

- We only have privacy in a certain situation, if we can make a justifiable claim for privacy in this situation. (Nagenborg 2005)
 - > Privacy is an interactive and cultural phenomena
 - > Contextsensitivity is an important issue
- Building blub-machine instead of naked machines
 - > Jeffrey Rosen, „The Naked Crowd“ (2004)

Privacy and the Ethical Design of Surveillance

Thank you.

www.michaelnagenborg.de