Lost in Translation: Privacy in Commercial Use of Biometric Data

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Outline

• The Law and Technology Paradigm
• Information Privacy
• Privacy in commercial use of biometric data
The Law and Technology Paradigm

Law

Legal response

Society

Technology
Can you 3D print drugs?
The technology exists, and while the hope is to make prescription drug distribution more efficient, there's also a dark side to the novel idea.

By Chris Gayomali | June 26, 2013
Gun Control?
The Law and Technology Paradigm

Law

Legal response

Social norms

Technology
The Law and Technology Paradigm

Reflects social norms

Social norms

Technology

Law
THOU SHALT NOT STEAL
The Law and Technology Paradigm

Shapes social norms
The Law and Technology Paradigm

Technological determinism
On free speech in an electronic age

Technologies of Freedom

Ithiel de Sola Pool

Winner of the 1984 Gladys M. Kammerer Award of the American Political Science Association
Imagine a World Without Free Knowledge

For over a decade, we have spent millions of hours building the largest encyclopedia in human history. Right now, the U.S. Congress is considering legislation that could fatally damage the free and open Internet. For 24 hours, to raise awareness, we are blacking out Wikipedia. Learn more.

Contact your representatives.

Your ZIP code: [ ] Look up

Stop Online Piracy Act

Jan 2012

SOPA Blackout
THE DARK SIDE OF INTERNET FREEDOM

THE NET DELUSION

EVLGENY MOROZOV

“Evgeny Morozov offers a rare note of wisdom and common sense, on an issue overwhelmed by digital utopias.” —MALCOLM GLADWELL
PRISM/US-984XN

Overview

OR

The SIGAD Used Most in NSA Reporting
Overview

April 2013
The Law and Technology Paradigm

Law

Society ← Social construction → Technology
Technology

• Technological determinism
• Social construction of technology
• Science, Technology and Society (STS)
  – How social, political and cultural values affect technological innovation
  – How technological developments affect society, politics and culture
The Law and Technology Paradigm

Law

Legal response

Law shapes Technology

Society

Technology
Law Shapes Technology

- Intellectual property laws
- Restrictions on R&D
- Liability rules
Code as Law
Lessig’s Code 2.0
Privacy by Design

*Privacy by Design* is a framework that was developed by the Information and Privacy Commissioner of Ontario, Canada, Dr. Ann Cavoukian. *Privacy by Design* advances the view that the future of privacy cannot be assured by compliance with legislation and regulatory frameworks; rather, privacy assurance must become an organizational default mode of operation.
Law and Technology

• The law responds to technological challenges
• The law shapes new technologies
• Technology substitutes for law
BIOMETRIC DATA FOR COMMERCIAL PURPOSE
Facebook’s ecosystem

Fb Messenger’s Facial Recognition “Photo Magic” Reminds You To Send Friends Photos Of You!

Posted Nov 9, 2015 by Josh Constine (@joshconstine)

We are busy and lazy, so we forget to send friends the photos we take of them. But Facebook Messenger’s newest feature Photo Magic scans your newly taken photos with facial recognition, and immediately notifies you with an option to send pics to friends that are in them. The test is rolling out in Australia today on Android and later this week on iOS, before reaching other countries if people enjoy it. Chief Messenger David Marcus says it will be available in the US soon.
The Law and Technology Paradigm
What is informational privacy?
A Muddy Concept

- My house is my castle??
- A Right to be Let Alone (Warren & Brandeis, 1890)
- Privacy (of people) in places
- Privacy in communications
- Privacy in public?
- Privacy as control
- Privacy expectation
- Contextual privacy
- Not confidentiality
- Not data security
Why protect privacy in data?

• Different levels
  – Collection of data
  – Storage, processing
  – Use, distributed, accessed

• Concerns
  – Autonomous choices?
  – Chilling effect
  – Power, vulnerability to manipulation
  – Equality, discriminatory use
  – Social control
A Virtual Panopticon
How the law protects privacy?
EU: Data Protection Directive of 1995

• A comprehensive approach
  – Personal data: "any information relating to an identified or identifiable natural person."
  – Opt in – informed consent
  – Fair and lawful processing
  – Purpose limitation
  – Data minimization, storage minimization
  – Accuracy, revision, deletion

• Reform expected 2016
  – EU General Data Protection Regulation
    • Privacy by Design, Privacy by Default
    • Biometric data
Israeli Data Protection Law

• Constitutional protection of privacy
• Privacy Act 1981
• Data Collectors - duties:
  – Registration (s.8)
  – Notice (s. 11)
    • Is there a duty to provide data?
    • Purpose
    • Onward transfers & purpose
  – Confidentiality (s. 16)
  – Data security (s. 17)
  – Enable access (s. 13)
  – Enable correction (s. 14)
## US

### Public Sector
- US Constitution
- State Constitutions
- Federal Law
- State Law
- Common Law

### Private Sector
- ..
- ..
- Federal Law
- State Law
- Common Law
U.S: Privacy in Commerce

• Informational privacy is the exception
  – Supply & demand, except market failures
  – Contracts, ToU, voluntary guidelines

• Federal law: sectorial regulation
  – Health
  – Finance
  – Children's Online Privacy Protection Act of 1998
  – Video Privacy Act
  – Family Educational Rights and Privacy Act
US: Commercial Use of Biometrics

• Federal Law
  – No general law on collection/use of BD
  – laws regulating collection/use of biometric identifiers in specific contexts (e.g., education).
  – FTC regulation against unfair or deceptive practices

• State legislation
  – Biometric Information Privacy Act 2008 (Illinois)
  – Section 35.50 of the Business & Commerce Code (biometric identifiers) (Texas)
Illinois Compiled Statutes


Information maintained by the Legislative Reference Bureau. Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as Public Acts soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the Guide.

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

CIVIL LIABILITIES
(740 ILCS 14/) Biometric Information Privacy Act.

(740 ILCS 14/1)
Sec. 1. Short title. This Act may be cited as the Biometric Information Privacy Act.
(Source: P.A. 95-994, eff. 10-3-08.)

(740 ILCS 14/5)
Sec. 5. Legislative findings; intent. The General Assembly finds all of the following:
(a) The use of biometrics is growing in the business and security screening sectors and appears to promise streamlined financial transactions and security screenings.
(b) Major national corporations have selected the City of Chicago and other locations in this State as pilot testing sites for new applications of biometric-facilitated financial transactions, including fingerprint technologies at grocery stores, gas stations, and school cafeterias.
(c) Biometrics are unlike other unique identifiers that are used to access finances or other sensitive information. For example, social security numbers, when compromised, can be changed. Biometrics, however, are biologically unique to the individual; therefore, once compromised, the individual has no recourse, is at heightened risk for identity theft, and is likely to withdraw from biometric-facilitated transactions.
(d) An overwhelming majority of members of the public are wary of the use of biometrics when such information is tied to finances and other personal information.
(e) Despite limited State law regulating the collection, use, safeguarding, and storage of biometrics, many members of the public are deterred from participating in biometric identifier-facilitated transactions.
(f) The full ramifications of biometric technology are not fully understood.


Biometric Information Privacy Act (Illinois)

- **Scope**
  - "Biometric identifier" means a retina or iris scan, fingerprint, voiceprint, or scan of hand or face geometry.

- **Notice & Consent**
  - A written notice 1) the collection of BI 2) the specific purposes and length of collection, storage and use 3) a written release from data subject.

- **Publicly available written policy**

- **Limited retention**
  - Up to 3 years from last interaction with the business

- **No sell or otherwise profit from BI**

- **Data security**
  - A business must protect biometric data in the same manner as it would other confidential and sensitive information in its possession.

- **Damages**
  - $1,000 per person for negligence $5,000 for intentional/reckless
Facebook Keeps Getting Sued Over Face-Recognition Software, And Privacy Groups Say We Should Be Paying More Attention

By Christopher Zara ON 09/03/15 AT 3:49 PM
Court rules Shutterfly may have violated privacy by scanning face photos

Civil lawsuits against Facebook and Shutterfly claim the sites violated privacy laws by using biometric facial recognition technology to identify people and store that information. Credit: Creative Commons Lic.

The lawsuit could set a precedent in other social network cases

BIPA Class Actions

• Collecting and scanning face geometry in uploaded photos without the consent of those featured in the images.

• Face recognition techniques to tag and track
  – scans every user-uploaded photo for faces
  – extracts geometric data relating to the unique points and contours (i.e., biometric identifiers)
  – uses that data to create & store a template
  – compares the face templates with uploaded photos

• Face geometry is a “biometric identifier“, requires informed consent before collection

• No use in commerce is allowed
Contracts

• Facebook filed a motion to dismiss, based on its Terms of Service
  – Apply California laws
  – Opt out
    • Facial recognition tagging feature is allowed unless the user opt out.
    • The tagging feature is enabled only for people who are "friends" on Facebook, who didn’t opt out.
Legal controversy: the scope

• "Biometric identifier"
  – a retina or iris scan, fingerprint, voiceprint, or scan of hand or face geometry. Biometric identifiers do not include writing samples, written signatures, photographs, human biological samples used for valid scientific testing or screening, demographic data, tattoo descriptions, or physical descriptions such as height, weight, hair color, or eye color.

• Defendant:
  – Photographs + any information “derived” from photographs are excluded
  – Applies only to faceprints that derive from in-person scan

• Plaintiff: “face geometry” is not excluded
Lessons

• Law could shape the design

• Informed consent might be insufficient
  – Information overflow
  – Too many choices
  – Data collection might be useful

• Challenges
  – Defining the scope biometric privacy
  – Developing features of embedded privacy