# Draft Notes from the Workshop

# October 2, 2015 (Friday)

## Welcomes

### Welcome by John Flaherty, HDC

When he started his studies at HDC, people would tell him: if you want a career in law and public policy; study water and privacy, because these two will become currencies.

Two things for the participants:

* Think practical. What we need are solutions;
* Think about the epic philosophical questions, for example about forgiveness, and who we are.

‘We are expecting great things from you.’

### Welcome by Jeremy Epstein (NSF)

Gives some background info on the SaTC program. NSF has collaborated with Israel before, now with NL, and later also Brazil.

The NSF Privacy Research Portfolio is a mix of technological solutions, and the understanding that solely technology will not help us to understand privacy.

SaTC-announce mailing list: send email to listserv@listserv.nsf.gov with message body: ‘subscribe SaTC-announce’. Ca. 10 messages per year.

### Welcome by Jan Piet Barthel (NWO)

Cybersecurity and privacy research context in the NL.

How to submit proposals through NWO and NSF channels.

Upcoming NCSRA Symposium 2015 (November 2).

## Introduction round

There is a quick introduction round in which all participants briefly introduce themselves. Then we move on to the six minutes individual presentations.

### Alfred Kobsa

Informatics: the people side of computers. He doesn’t use the term ‘informatics’ in the Dutch/EU sense.

Worked in personalization, moved into privacy. Two directions:

* Helping users in making privacy decisions (e.g. on the new Windows Phone, and on Facebook)
* Privacy control in an environment without a User Interface

### Guido van ‘t Noordende

Computer scientist, moved to authorization and access control in medical systems.

Recently started his own company: Whitebox Systems, a novel healthcare communication system with distributed discretionary access control.

Researches authorization, also in relation to ethics and privacy. Sees a shift of responsibility in who manages access to what and who manages the policy. Trend is to centralize control; his Privacy by Design system for medical data decentralizes control again, by giving back control to the doctor.

### Ritu Agarwal

Has done a lot of privacy research, and now focuses on her role as director.

She has a background in mathematics, computer science, and information systems. Today she would call herself a social scientist.

She works on privacy issues in health care, e.g. information exchange in online health care communities, and digital disparities.

Her privacy research is about understanding what factors help to explain variations in people’s willingness to disclose information. She has done that in many different contexts, like location based services, health information, and recently genetic information.

### Hadi Asghari

Prior work: economics of cyber security. Tries to understand behavior of internet actors (ISPs, hosting providers, etc.) and what that could mean for policy.

New work moving into: privacy economics. Starts with an observation: in the online services market there are two extremes of business models, whereas in a normal (off line) market you would expect more shades. The question then is: can market forces deliver privacy?

### Helen Nissenbaum

Current or recently completed projects for which she collaborated with other researchers:

* Book about obfuscation
* Contextual Integrity
* Empirical study and measurements
	+ Revisiting the Pew study about sensitive information, and revisiting Westin three privacy types
	+ Measuring Quality of Service and costs due to tracking and advertising

### Ronald Leenes

He has an identity crisis about ‘who am I’. In addition, he has a short attention span. Therefore he is now suddenly interested in robotics.

### Norman Sadeh

Two research focuses:

* Modeling user privacy preferences
* Modeling privacy expectations

Has another NSF funded project going on in this area.

### Beate Roessler

One of her basic questions: autonomy.

### Apu Kapadia

Two strands:

* Electronic privacy is getting physical (think about sensors!). He has an NSF funded project on wearable cameras.
* How does privacy affect our behavior? How can we build accountability measures to keep people under control? E.g. cryptographic measures for accountability.

### Jeroen van den Hoven

Wonders how we can be more explicit in the justification of the moral requirements we want to build into our technology (as is the case with privacy?

ERC Advanced Grant.

Privacy & Big Data Expert Group, appointed by Minister Kamp.

His research showed that the US debate is about ethics and privacy, whereas the EU discussion is mainly about data protection. These communities are separated.

His research reconstructs innovation as a moral conception. Therefore what is needed is value sensitive design.

### Aimee van Wynsberghe

She recently started working in the area of ethics and care robots. What is the meaning of privacy in this domain, in the context of different types of robots?

She has a new NWO funded project about ethics and service robots (GW/MaGW).

She identified two types of privacy issues:

* Fundamental privacy issues (robot responsibility, accountability, etc)
* Applied privacy issues (informed consent, safety and security).

She is an ethics advisor for CTIT. She encourages engineers to reflect on their design.

### Bibi van den Berg

Bibi wrote her PhD about Identity, in Internet of Thing situations among others. She did not focus on privacy in particular, even though it was part of it.

She finds that from the end users perspective privacy is really a security issue.

She is interested in understanding what privacy is about. It bugs her that every time someone at a party tells here ‘I’ve got nothing to hide’, she doesn’t have the right answer why privacy matters. She is motivated to find that answer.

Alessandro adds that his answer to the “Nothing to hide-argument” is: give me your credit card, then I’ll make a photo of the front and back side and upload it to the Internet. At that point people will change their minds!

### Alessandro Acquisti

Started in economics, then moved to privacy.

He discussed the idea about the privacy paradox.

It is thought that privacy regulation harms technological innovation, but he showed that privacy regulation among others decreases uncertainty. Privacy regulation and some other factors might actually spur innovation.

Other research questions answered:

* Do Facebook profiles impact the hiring behavior of US firms?
* Do control and transparency protect privacy?

Now the question is: What Big Data do we want?

### Jaap-Henk Hoepman

He notes that it seems to be that everyone in the room started as a ‘hard’ computer scientist and then became more soft. It’s the same for him.

He explains that privacy by design is hard for engineers to comprehend. Therefore, he tries to translate the legal requirements into privacy design strategies.

The more technical part of his research is about revocable privacy.

### Frederik Zuiderveen Borgesius

New: works for the Personalised Communication project at the Institute for Information Law (IViR), University of Amsterdam.

He is more and more interested in the discrimination effects of data. See among others his recent paper about Online Price Discrimination and Data Protection Law.

### Gene Tsudid

Has been doing research for 27 years in privacy and security. Gene emphasized that he is a computer scientist, and nothing more. He likes to reach out further, beyond the computer science community, but he hasn’t done that so far.

His experience is that it is very hard to get networking and security people work together. It’s even harder than to get lawyers and security people to work together.

Some topics:

* Stylometric privacy.
* Cryptographic privacy
* Genomic privacy
* Privacy in offline OSN interactions.

### Jeanne Bonnici

She is a lawyer, but she has always been thinking like a politician. In addition she also did some studies in cognitive science. She has been doing research in *data protection* since 1993. In this context she expressly does not use the term ‘privacy’, to signal her European background.

Because of her legal practice background she aims to find remedies.

She has a very nice slideshow in which the formulated her research interests by reference to the four themes that where set out in the Workshop briefing.

### Latanya Sweeney

She is a computer scientist, driven by her desire to proof things scientifically.

Before she worked for some time at the Federal Trade Commission, which was really interesting. There she learned how technology designers are the new policy makers, and she just published a book on that.

Furthermore, while at the FTC she realized that you need simple scientific facts (for example: Google’s algorithms *do* serve biased adds).

### Joris van Hoboken

Is an expert in the transatlantic comparison on the collection or use regulation debate.

He sees an increasing tendency to use data protection as the framework to solve or balance all kinds of issues.

He has done investigative research into how the data brokers market is developing. He thinks there is something new going on and he tries to articulate this.

### Travis Breaux

He started in anthropology, but is a computer scientist now.

Travis is looking at two extremes in data culture: maximize data utility – minimize privacy risk. The future will be somewhere in the middle. As a researcher he needs to find the tools to balance these two.

### Inald Lagendijk

Is an electrical engineering by training. Nowadays he is interested in embedding privacy in algorithms. This is in the field of data minimization and privacy enhancing technologies. It can also be applied in smart grids, for example data aggregation.

For the workshop he is looking for clear added values of transatlantic collaboration.

### Rachel Greenstadt

She is interested in the question how machines can help humans make decisions about security, privacy, and trust.

### Bart Jacobs

Bart has a background in mathematics and philosophy. He is doing a mix of theoretical and practical work (zie bijv. imcard.org). He finds it interesting to see that the uptake of his IRMA tool is limited, and he wonders how that can be explained.

### Ryan Calo

Notes that he is the only American law professor here. Furthermore he is the only participant without slides, and he jokes that he will use the Socratic method, like all US law professors do.

### Mireille Hildebrandt

Mireille has an issue with a specific way of framing things, which is based on a very rational way of seeing human persons.

In her view the shifting focus from profiling to (mindless) agency is way more important than data use and protection.

### Laura Brandimarte

She has an economics background. Laura has a different interpretation of behavioral economics than some of the previous speakers.

She studies privacy decision making - that is, online disclosure of personal information, in particular in social media sharing. She combines this with experimental methodology.

# October 3, 2015 (Saturday)

# Wrap up of the breakout sessions

## Identity (presented by Norman)

The first thing that the group did was questioning the topic. They had concerns about the concept of identity management, and suggest ‘self-management’ as a better term. They identified two areas that might contain interesting research themes:

* The right to be forgotten. In this area researchers need to make use of the differences between Dutch and US researchers. What is the relation between people’s expectations of privacy, and the right to be forgotten? What are their privacy preferences?
* Privacy disasters. There are two categories:
	+ Hackers
	+ Unintentional disclosures with harmful consequences
	+ What are the risks that people are exposed to these?

Alfred adds the question: How does privacy self-management look like in the US versus the EU environment?

## Real/Virtual (presented by Apu)

He states how he hadn’t had such a fun discussion for a long time.

A recurrent theme was the blurring and bending of boundaries. Is there a boundary between the real and the virtual? Some will say no.

Our physical privacy is at risk. What are those not directly involved in technology (users, policy makers) planning to do about this?

And what is the value proposition of the current abundance of these smart things? Do we really need a smart bed, a smart toaster, a smart shower?

Three options: Avoid environment; Change your behavior; Effective change in data collection.

Would technology have a ‘norm core’ effect? This might be bad.

Where is the boundary between the real and the virtual, and should there be a boundary? Apu recites the example given by Laura about cars nowadays: these are all software controlled, instead of mechanically controlled. It might be unethical if people are not aware of that.

Furthermore, people might disclose more information when they are interacting with an anthropomorphic robot. This leads to the question: how anthropomorphic should we design such robots? We might cross a line at a certain point.

## Minimisation (presented by Beate)

The group had a long discussion about (the meaning of) what *is* data minimisation, and whether if this is actually still possible. They decided to focus on the question: What is the value of data?

Several perspectives are needed to study this question:

* Are there any differences between US and EU privacy cultures, laws, etc. in the context of data minimisation?
* If we take the context of health care, social media, and financial data, we should study these from economic, legal, technical, and ethical perspectives.

What we need is more empirical research on the economic value of data.

What are the technological possibilities? Chris says that anything we want, can be done technically. This leads to the question: How is a particular solution technologically feasible, from a normative perspective?

Someone in the audience responds that we should distinguish data that you could change later, and data you cannot change (for example to school you attended). It is added that there should also be more research into how this types of solutions can be technically enforced and implemented.

Everyone agrees we should come up with a better understanding of the data ecosystems. Latanya adds that this also relates to privacy governance.

## Constructing privacy (presented by Helen)

They moved from the question of how to understand privacy to some ‘easier’ questions. Productive points of exchange are:

* The different ways we (the US and the EU) each use the term privacy. In the US we tend to use the term privacy in the sense of what in the EU is called data protection. In the EU the term privacy also covers additional things.
* Concept of Personally Identifiable Information (PII) in the EU and concepts of sensitive information in the US have an important role in policy, but these concepts should be explored more extensively.
* Everyone seems to be very happy with the status of Privacy by Design. The question is how can we promote this field? This also raises questions about ethics training. For example, can we educate software engineers in such a way that they will learn to understand the philosophical questions, and the reverse? We could achieve things with education.

Finally, to a meaningful Privacy Impact Assessment (PIA), we should understand conceptions of privacy.

Meaningful PIA? To do this, conceptions of privacy have to be fully understood.