ICT-mediated information sharing in public spaces

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Information sharing with strangers in physical proximity is critical
  - Diversity, social cohesion, community identity, support, ...

Can ICT help? Yes ...
  - Rich content, filtering, asynchronous communication, ...

BUT
  - Privacy, surveillance, and control
  - Selective exposure, virtual interactions, and addiction

What can we do?
  - Awareness, ownership, customization, experimentation
Outline (2)

• Privacy & surveillance
  – Worse than we believe!

• But this is not the only problem
  – Power, manipulation, social engineering

• It is also our fault
  – Usability first, self-promotion, addiction

• What can we do?
  – Awareness, ownership, customization, experimentation
Parenthesis on P&S

Main points made at the Congress on Privacy and Surveillance, EPFL, September 30th

- Legal framework very weak
- EVERYTHING is recorded and correlated
- Unimaginable storage and processing capabilities
- Technology (crypto) not powerful enough
- Long-term dangers not visible

- And the worst: People do not care!

Do they record/care about the everyday interaction I have with my wife? YES!

http://ic.epfl.ch/privacy-surveillance
NetHood: Bridging the virtual with the physical

Facebook helps you connect and share with the people in your life.

NetHood helps you connect and share with the people in physical proximity

Apostol, Antoniadis, and Banerjee, “From Face-block to Facebook or the other way around?”, Sustainabile City and Creativity, Naples, 2008
Many online neighbourhood communities trying to bring neighbours together

NextDoor recently raised $21.6 million
Also community wireless networks

http://tidepools.co
More complicated than this

- People do not necessarily want to interact with their neighbours
  - Lack of common interests
  - Limited free time
  - Different cultures even languages
  - and more ...

*Living with people who differ—racially, ethnically, religiously, or economically—is the most urgent challenge facing civil society today.* – Richard Sennett
Social learning approach

- Simple information sharing game
- Experiment with customization options
  - Anonymity level
  - Type of information shared
  - Statistics produced
  - Access rules
  - Memory and data sharing
- Trial and error + interdisciplinary research
The NetHood Toolkit

Information sharing games

different games

different neighbourhoods

Real life experimentation

repetition

social learning

A “lingua franca” between computer science, behavioural economics, and urban planning
Related work

Peter Conradie, Stephanie Neumann, and Jonas Breme. 2011. Trust Thy Neighbour: Exploring Information Sharing in Anonymous Urban Settings to Support Trust Generation. CHI Sparks Conference. Arnhem, Netherlands
Hybrid Letter Box

The letter box easily transforms analog input into digital data and is one of the first access points we designed for our neighborhood infrastructure. The ritualized act of posting a letter is used to bridge the gap between the physical with the digital space. This letter box mirrors our goal that neither prior knowledge nor specific digital devices should be needed in order to take part in the sociopolitical network we are designing in order to enable communities to develop resilient actions. The letter box transfers a hand-written message to a digital platform so the issue can be spread effectively and publics can form around the discourse possibly emerging around it. To see the issues posted during the box's first test run at the European Neighborhood Festival at the Fischerinsel Berlin, click here.

From neighbourhoods to public spaces

No need for immediate physical contact

Attention and device availability

Plenty of free time
Many related Internet-based apps
Important missing details

- Inclusiveness
- Customization
- Locality
- Privacy and surveillance!
The technology exists

BYO-wifi network

WIFI-CAPABLE DEVICE
iPhone, non-jailbroken

PORTABLE BATTERY
TeckNet iEP387

TRAVEL WIFI ROUTER
TP-Link TL-WR703N

USB THUMB DRIVE
8GB, formatted ext4

USB CABLE
USB2 Micro B / USB2 Type A
(comes bundled with the wifi router)

occupyhere.org

NETGEAR

☐ OCCUPY.HERE

Other...

Ask to Join Networks ✗ OFF

Known networks will be joined
But the details matter

Pirate Box

NetHood information sharing game
Let's start simple

- From Personal Computer to Personal Network
  - your laptop as a captive portal!

- We are building a plug&play and customizable social software
  - Where you are? What type of application do you want to host?
  - Choose the rules, data collection and aggregation options
  - Press “build my personal network”

Join [http://nethood.local](http://nethood.local) WAP

Joint work with Sascha Trifunovic (ETH Zurich)
Thank you for your attention!

- We are searching for
  - Collaborators
    - For research, development, experimentation
  - Volunteers
    - For running local nethoods in their free time
  - Critics
    - For good questions :-)
As soon as public service ceases to be the main business of the citizens, and they prefer to serve with their pocketbooks rather than with their persons, the State is already close to its ruin. Is it necessary to march to battle? They pay troops and stay home. Is it necessary to attend the council? They name deputies and stay home. By dint of laziness and money, they finally have soldiers to enslave the country and representatives to sell it.

—Jean-Jacques Rousseau