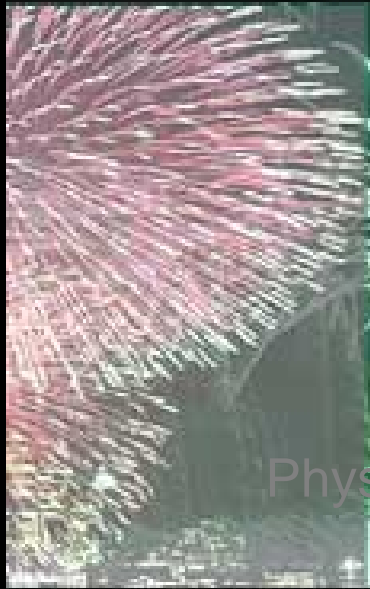


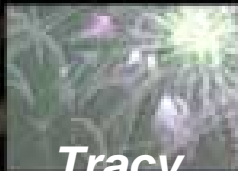
Layers of mediated space



Physical



Personal



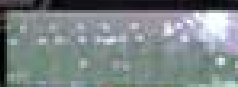
Tracy



er



Introduction



Conclusion



The Advent of "Mediated" Space: Public Places and Technology



New communications media have given rise to technological systems and networks that re-order the city

Framework for a new social place

".. cyberspace is the homeland of the Information Age - the place where the citizens of the future are destined to dwell."

--John Perry Barlow, 1991

Change view of the city

digital city visualizations – Kajin Goh

city of messages

urban scattered bits

cash and media flow

sell space

social machines

terminal city

self-generating virtual environment

citizen as architect

modularity

de-regulation

trans-nationalism

community

Is technology altering public space?...

New community form

hub for R&D

tests new products

digital influenced events

experiments with technologies

new atmosphere stimulates:

excitement, creativity and
innovation

Seoul: Digital Media Street

laboratory for invention &
technology testing

**“live, work and be inspired by leading scientist and researchers
from around the world”**

Urban retrofitting

Combinations of electronic and physical places

Accenting the meanings of physical place

Introducing a new layer of electronic presence

Spectrum of technological integration:

“unplugged” designs

“adaptive” designs

“transformative” designs

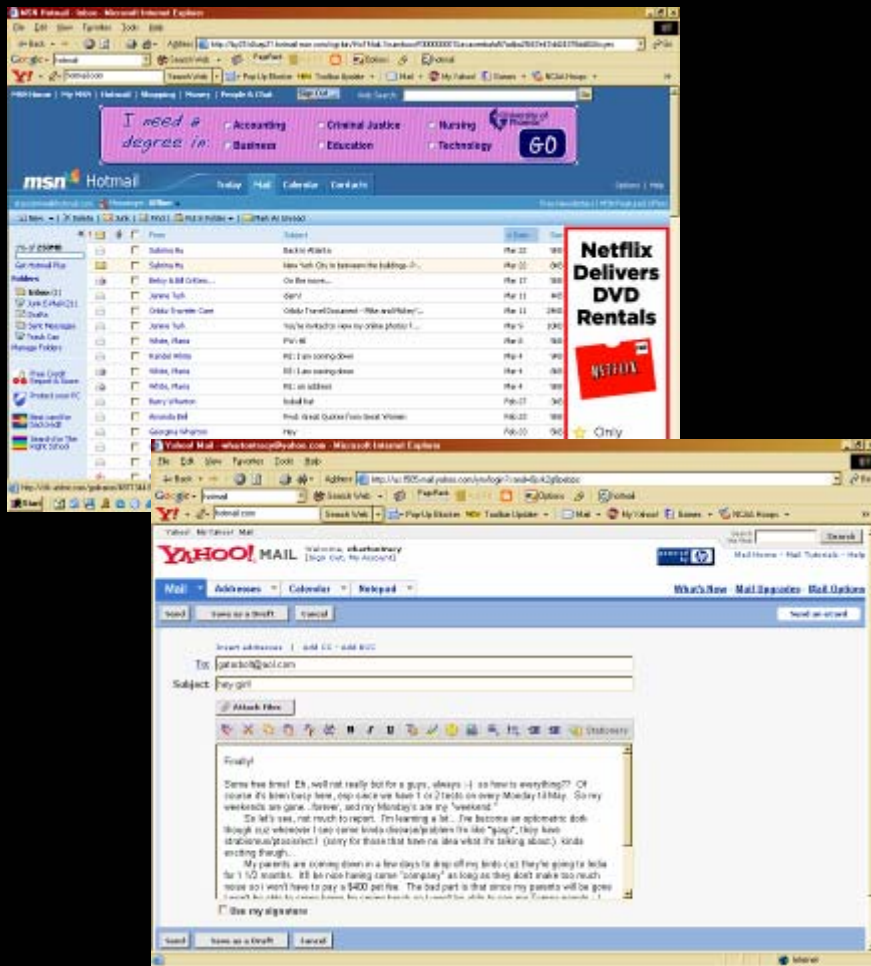
Altering personal interaction: New technologies

Technology has altered the way
people interact and
communicate with each other...

Positively?

Negatively?

Altering personal interaction: Email



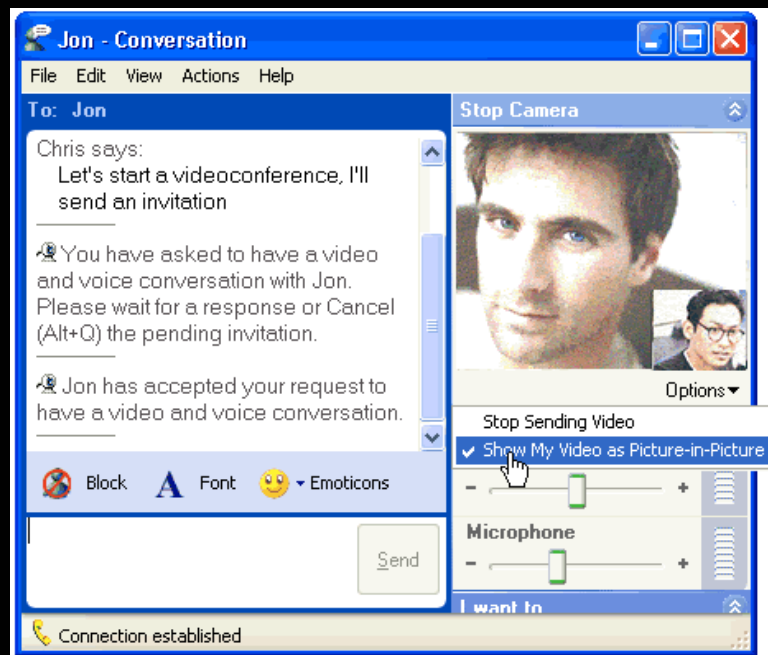
Finding from a survey on internet users in North America:

- use of e-mail added to social interaction
 - did not substitute for other forms of social interaction
 - more important for interacting with friends than with kin
 - relevant for keeping in touch with people at a distance
- Barry Wellman's team, National Geographic Website

(Castells, The Internet Galaxy, 2001)

Altering personal interaction: Video Conversations

evolution of an everyday social activity and means of communication:
the telephone call



helps geographically separated people communicate, collaborate and make decisions

Altering personal interaction: video conferencing

Physical proximity has become less of a necessity in the world today



Small business

Corporation

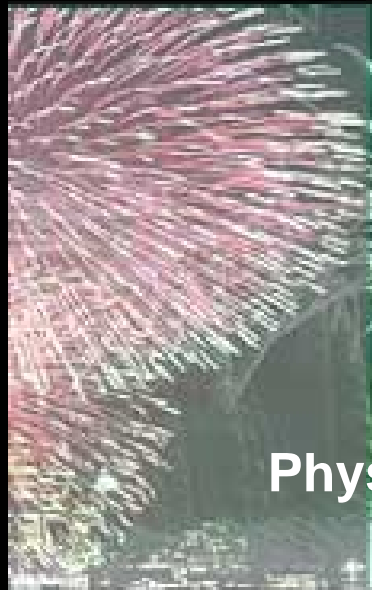
Redefining space and place: public-private

Blurring division between
public and private

private becoming public

public becoming private

Layers of mediated space

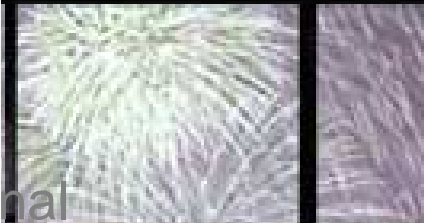


Physical



Shouheng

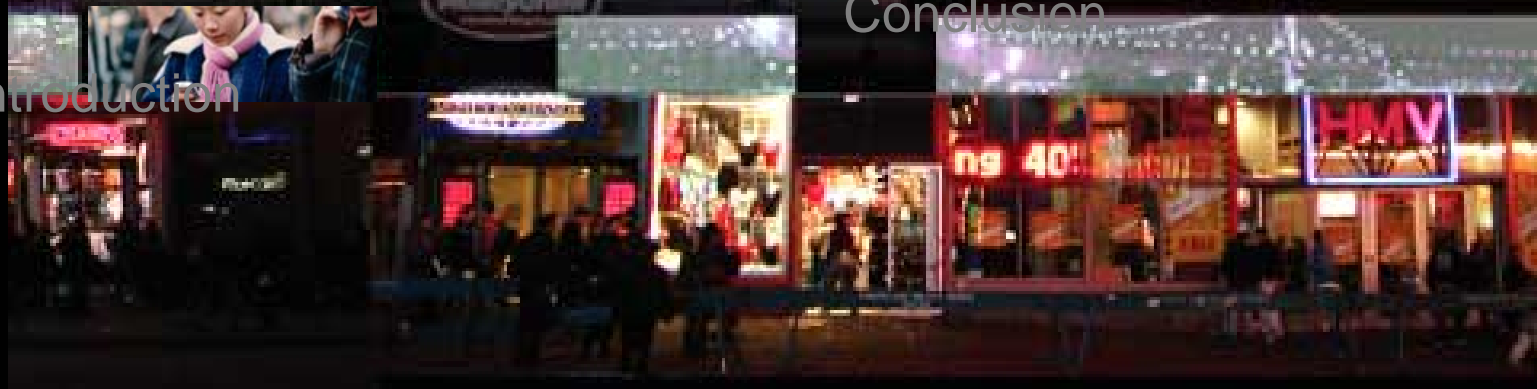
Personal



er

Conclusion

Introduction



PHYSICAL IMPACTS OF TECHNOLOGY ON PUBLIC SPACES

- I. Informative building facades
- II. Interactive building environments
- III. A medium to blur the boundary between public and private spaces
- IV. A tool for property/space management/maintenance

I. Informative building facades

-*New York Times Square;*

-*Yonge Street of Toronto;*

-*Eberswalde Library in Berlin.*

Informative building facades, Example 1:
Yonge Street, Toronto:

Example 2:
Eberswalde Library, Berlin:

Example 3:
New York Times Square:

"It's hard to imagine Toronto's Yonge Street as anything other than a flourishing entertainment and business area, with flashing neon and electronic lights and an endless parade of people. This major street has been the main street of Toronto since the late 18th century, witnessing the evolution of our city." (from History of Toronto)

II. Interactive building environments

- Spatial interactivity: 3-Space Station Module;*
- Images interactivity: Millennium Park, Chicago;*
- Environmentally responsive interactivity: .*

Interactive building environments Example 1:
Millennium Park, Chicago:

Example 2:
FreshH2O eXPO by NOX:

Example 3:
**3-Space Station Module by Kas
Oosterhuis:**

“Millennium Park was described by Chicago Mayor [Richard Daley](#) as the crowning achievement of the vision set forth by the original founders of Chicago in 1837. “The city’s motto, ‘Urbs In Horto’ or ‘City in a Garden’ has never rung truer. Today’s Millennium Park marks the Millennium for the ages and leaves Chicago with a marvelous venue to be enjoyed and cherished for generations to come,” the Mayor said. (By Renato Pesci)

Interactive building environments
Environmentally responsive interactivity :



Berger+Parkkinen's Berlin's Nordic Embassies

Programmable Window by SENSEable City Laboratory

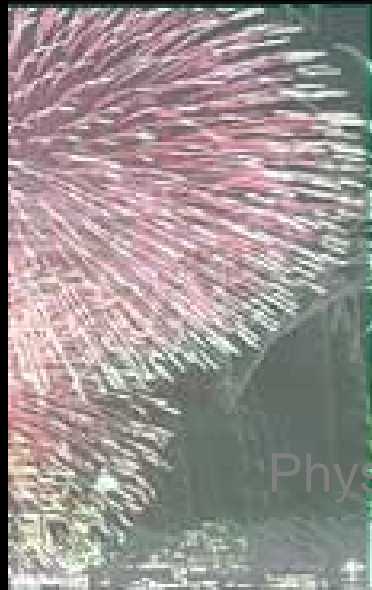
A medium to blur the boundary between public and private spaces

A tool for property/space management/maintenance

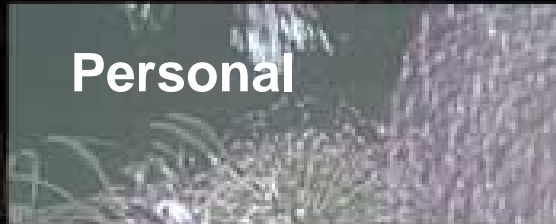
traffic controls: LA HOT freeway lanes;

traffic controls: London congestion charges

Layers of mediated space



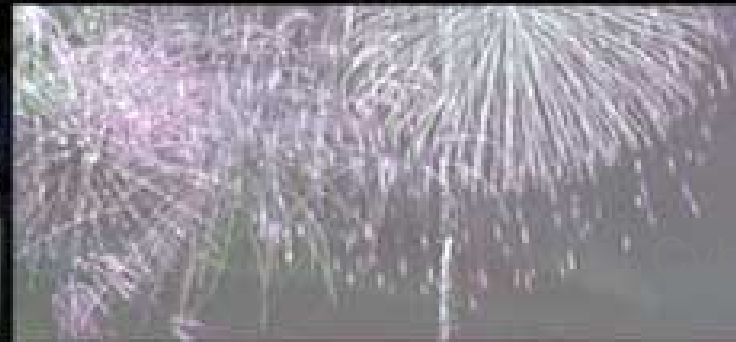
Physical



Personal



Andres



Conclusion



Introduction



The first commercial cellular telephone system began operation in Tokyo only **26** years ago.

Today, in the U.S. there are **159 million** owners, which equates to **0.81** cell phones for each adult. In Finland there are **1.34** cell phones per adult.

CIA-The World Factbook

www.tele2.ee

If we can stay in touch anywhere, where do we want to stay?

What happens when work becomes unwired? One could surf the web for ex...

Mobile can be anywhere...but some places are better than others.

New opportunities create new boundaries between public/private realms.

Does (should) public space respond?



© by bernd schubert B|S digital photography



© by bernd schubert B|S digital photography

Intro / Tracy Wharton / **Physical** / Shouheng Chen / **Personal** / Andres Sevtsuk / **Cyber** / Christine Caine / **Conclusion** / Jake Wegmann /

Current issues:

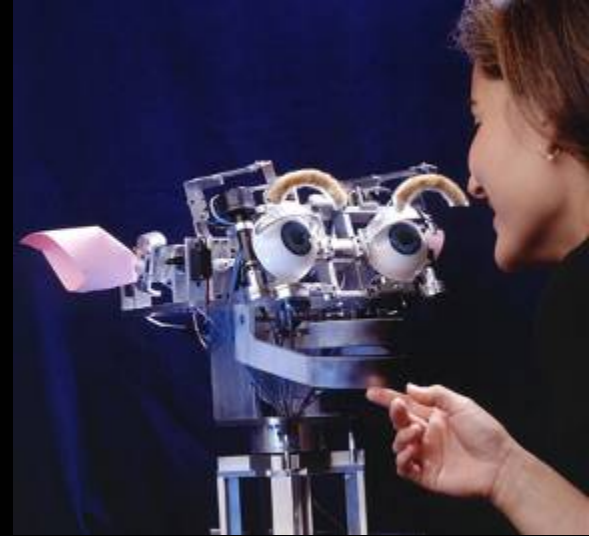


- Can barely see the screen
- Need power outlet
- Technology is not weather-proof
- Theft security...too much to lose...

© by bernd schubert B|S digital photography

Emergent solutions...better machine / human interfaces.

Technology enters from gadgets to common objects, street furniture etc.



Touch control

Voice / Motion interface

Body Control

Eye – tracker control

History Unwired is a mobile media initiative started by graduates of MIT and the University of Architecture, Venice. The goal is to create multimedia tours and handheld navigation tools that put visitors in touch with the people, events, and history of Venetian neighborhoods.

MapQuest Find Me (downloadable application for your GPS enabled cell-Phone

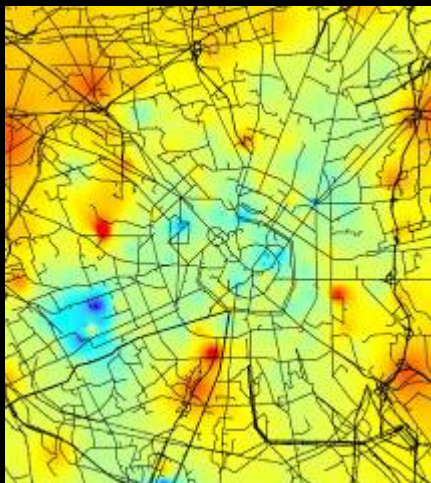
- Finders: people, places, pets, assets...
- Location-based social networking & games
- Mobile workforce management
- Geo-tagged photography

I can see the world, the world can see me...

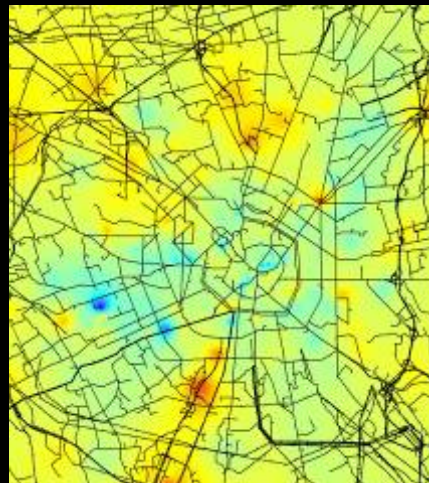
Tracking personal communication devices offers unprecedented means of understanding of how cities work in real time.

Has the use of public space changed due to new communications technologies?
We'll find out...

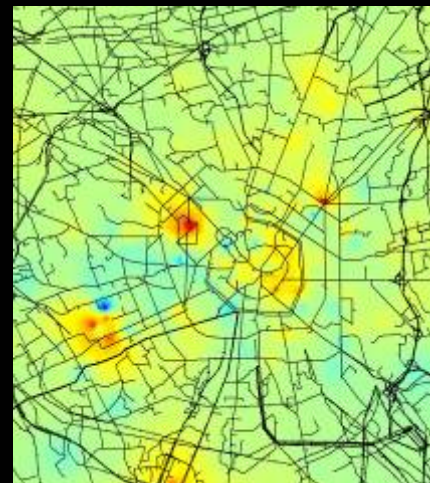
8 am



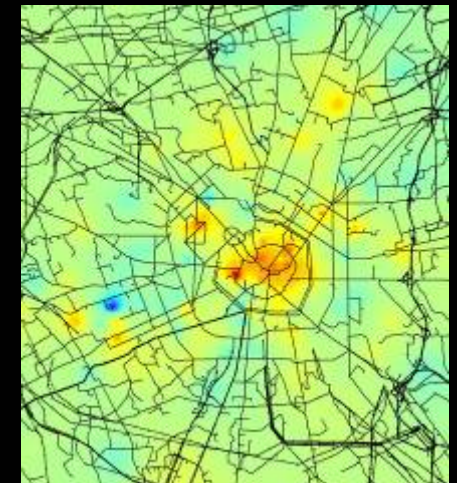
9 am



11 am



1 pm

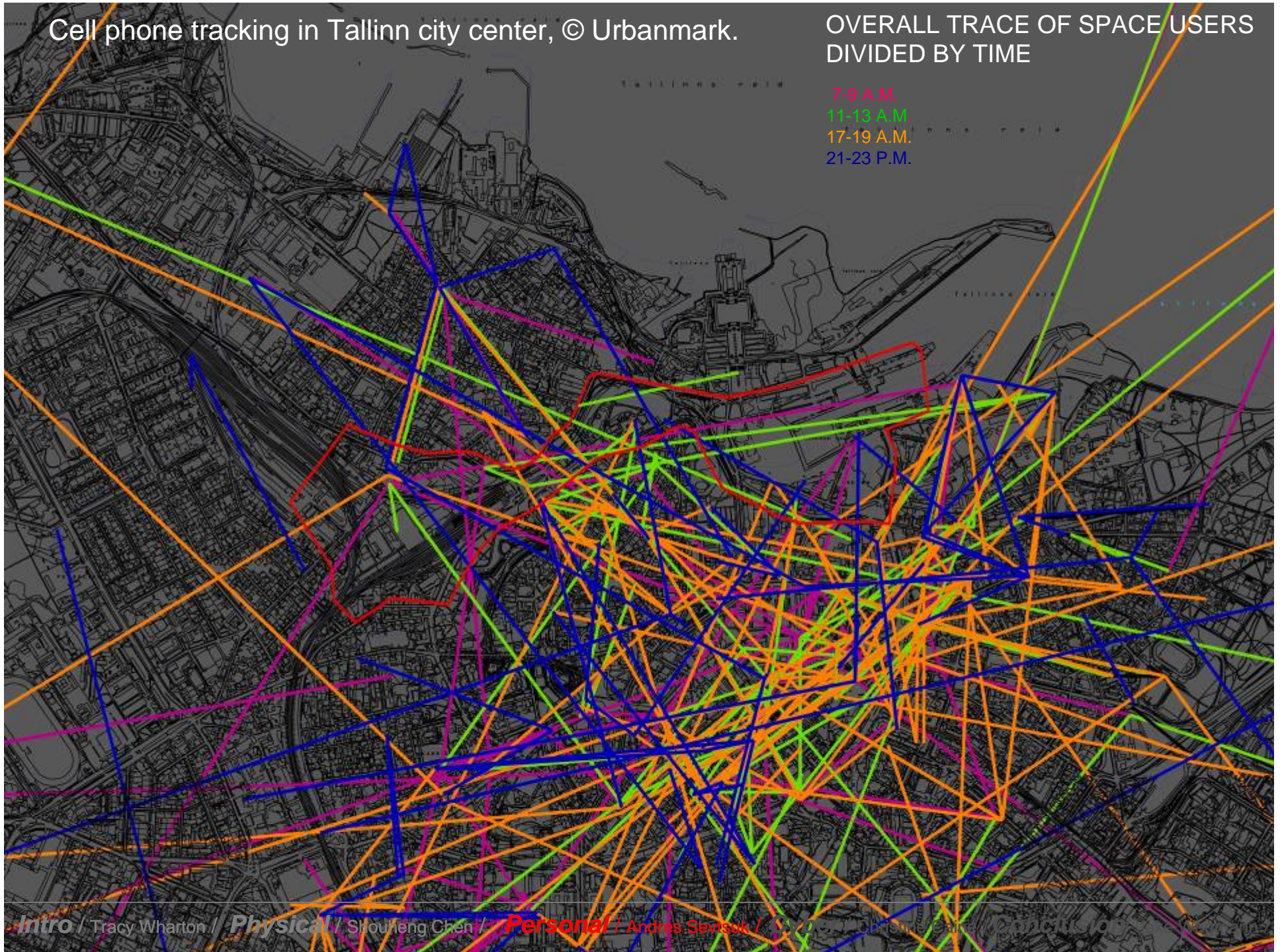


maps showing areas with different cell phone call density in the metropolitan region of milan (© senseable city laboratory)

Cell phone tracking in Tallinn city center, © Urbanmark.

OVERALL TRACE OF SPACE USERS
DIVIDED BY TIME

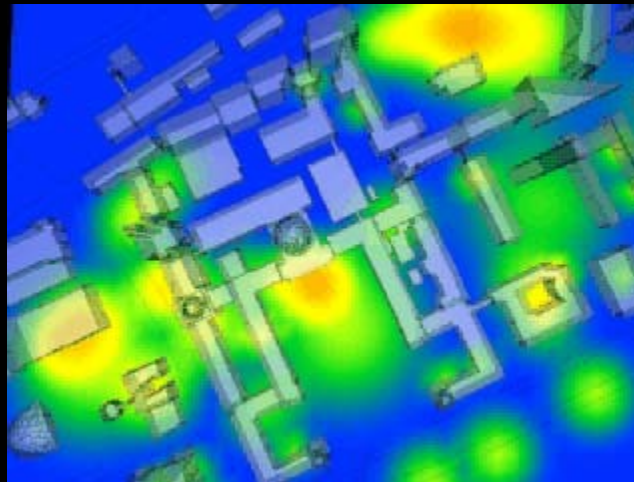
7-9 A.M.
11-13 A.M.
17-19 A.M.
21-23 P.M.



Is WIFI changing the use of public space on MIT campus?



iSPOTS *Senseable City Lab* Studying MIT campus through WIFI usage.



Layers of mediated space

Christine



Personal



Physical



Cyber

Conclusion



Introduction



Upper 8 floors turned into a huge display by
144 lamps set behind the building's façade.

Interactive- could play pong on the building's
façade, from your mobile phone

Blinkenlights

Haus des Lehrers office building
Berlin Alexanderplatz

Aegis Hyposurface

DECOI

“The surface deforms according to stimuli captured from the environment...
noise, temperature and movement” create a “near infinite series
of changing environments”

The Able Skin

Emilio Lopez-Galiacho (concept, visuals)

Rafael Lozano-Hemmer and Will Bauer
(interaction)

Virtual walk-through of historic buildings:

Parthenon

Leaning Tower of Pisa

Villa Rotonda

The participant's **motion** controls the point of view in the projected environments on the wall and on the floor

Webhotel

(Fabrications Exhibition)

Placa dels Angels, Vicente Gualart

“Room numbers” marked on front elevation allow users to easily track the real-time changes on the façade while logged on to the “webhotel” website

System of lights, corresponding to the grid of each apartment, is connected to a web page on the Internet

PRADA

(Los Angeles, CA)

Rem Koolhaas

Ubiquitous screens:

system of “ubiquitous screens” not only creates an interior façade, but also can be used as communication platforms for staff and customer.

Interactive dressing room:

Doors made of glass which the customer can control for privacy; from transparent to translucent.

RFID (Radio Frequency IDentity) antennas track the garments brought into the dressing room, and display information regarding the items on a touch screen.

Plasma screen “mirror” which allows the customers to see themselves both from the front and back at the same time.

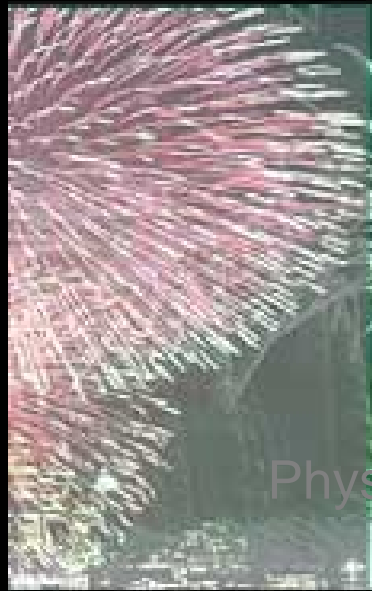
E-INK

Yomiuri Global Newspaper
EXPO 2005 Aichi, Japan

LCD screen 2.2m x 2.6 m
Interactive newspaper

Will be exhibited at the Yomi
Newspaper booth in the “Global
House”, a pavilion in the Nagakute
exhibition site.

Layers of mediated space



Physical



Personal



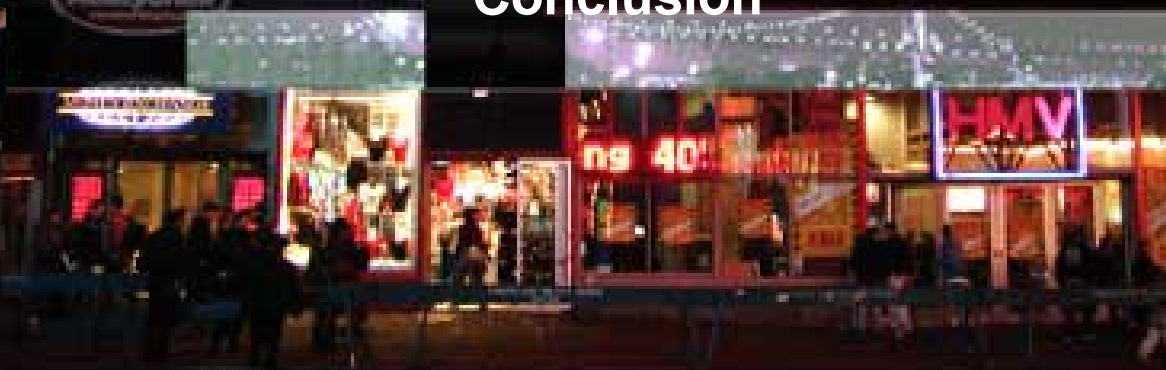
Jake

Cyber

Conclusion



Introduction



What will the future bring? Four stories, and four predictions

Prediction #1: More Demand for Physical Public Space

"If anything, the Internet seems to have a positive effect on social interaction, and it tends to increase exposure to other sources of information."

--Manuel Castells, *The Internet Galaxy*

2. More Monitoring and Surveillance

“Officials ... said they studied systems used by ... the city of London, where it's said that the average resident is viewed by 300 cameras a day.”

- Debbie Howlett, “Chicago Plans Advanced Surveillance,” USA Today

Prediction #3: Greater Customization

F7100 Handset, LG
(South Korea)

Prediction #4: Blurring of Boundaries Between the Public and the Private

Starbucks Interior, Anywhere

BP Pedestrian Bridge, Chicago

OUR PREDICTIONS FOR THE FUTURE

1. More Demand for Physical Public Space
2. More Monitoring and Surveillance
3. Greater Customization
4. Blurring of Boundaries Between the Public and the Private