

PeerSON

Peer-to-Peer Social Networks

Sonja Buchegger
Deutsche Telekom Laboratories
sonja@ieee.org

Inria Saclay, March 9, 2009

Ubiquitous Computing Privacy

Leaving traces

Physical world

Surveillance

Privacy breaches

Centralized user data

Data mining

Targeted advertising



Also online

Leaving traces

Virtual world

Surveillance

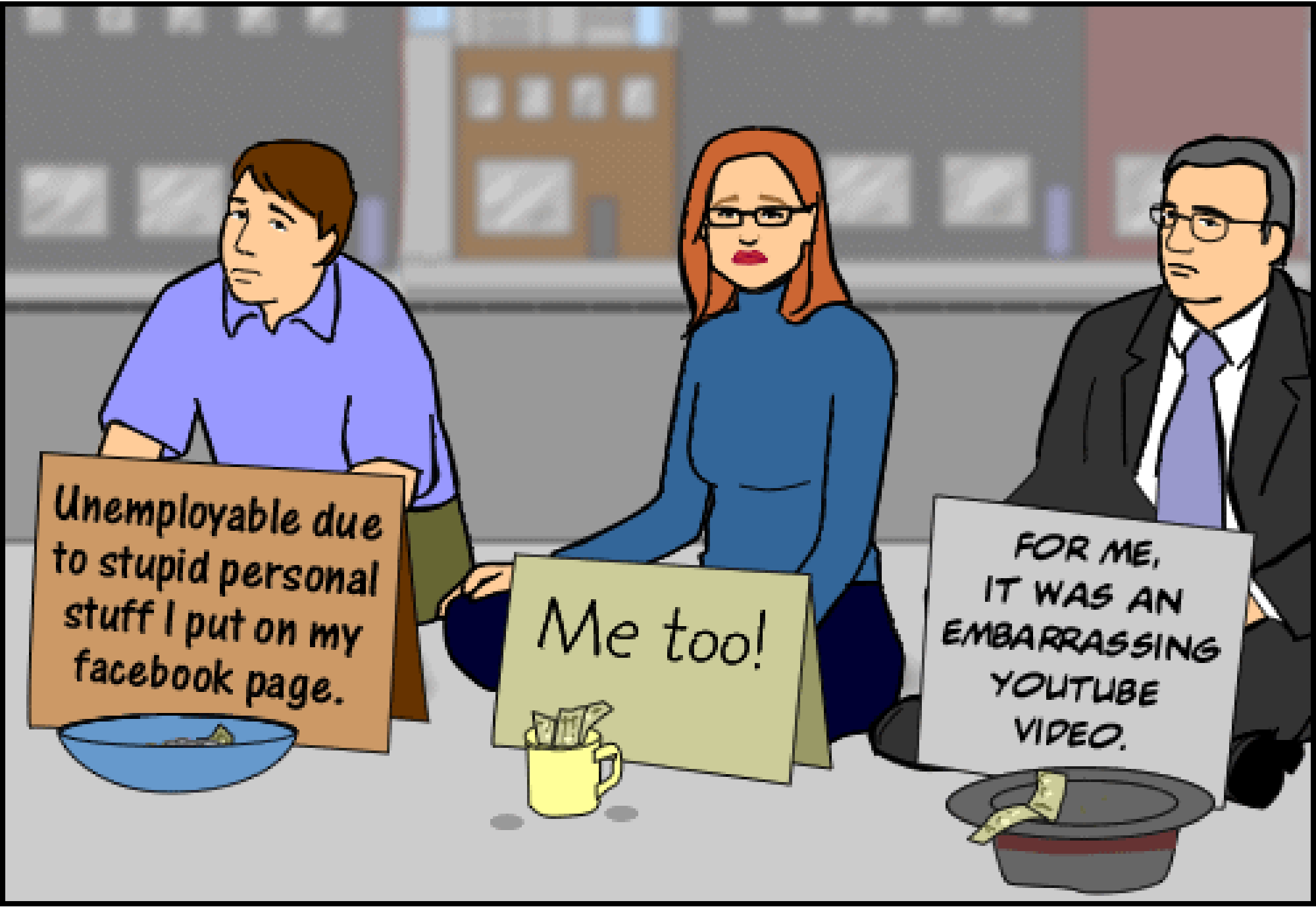
Privacy breaches

Centralized user data

Data mining

Targeted advertising

Revealing information

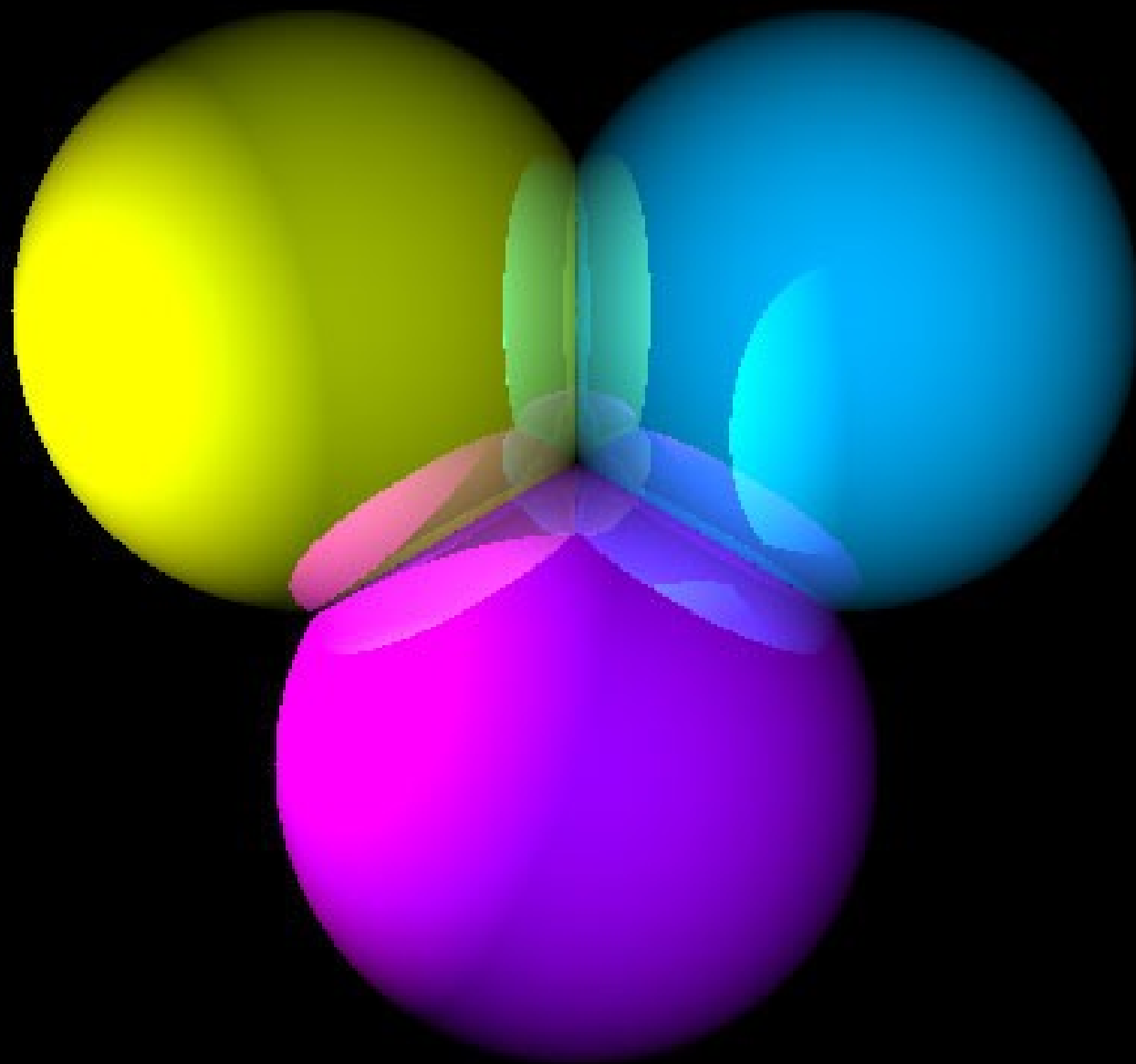


Signs of the social networking times.

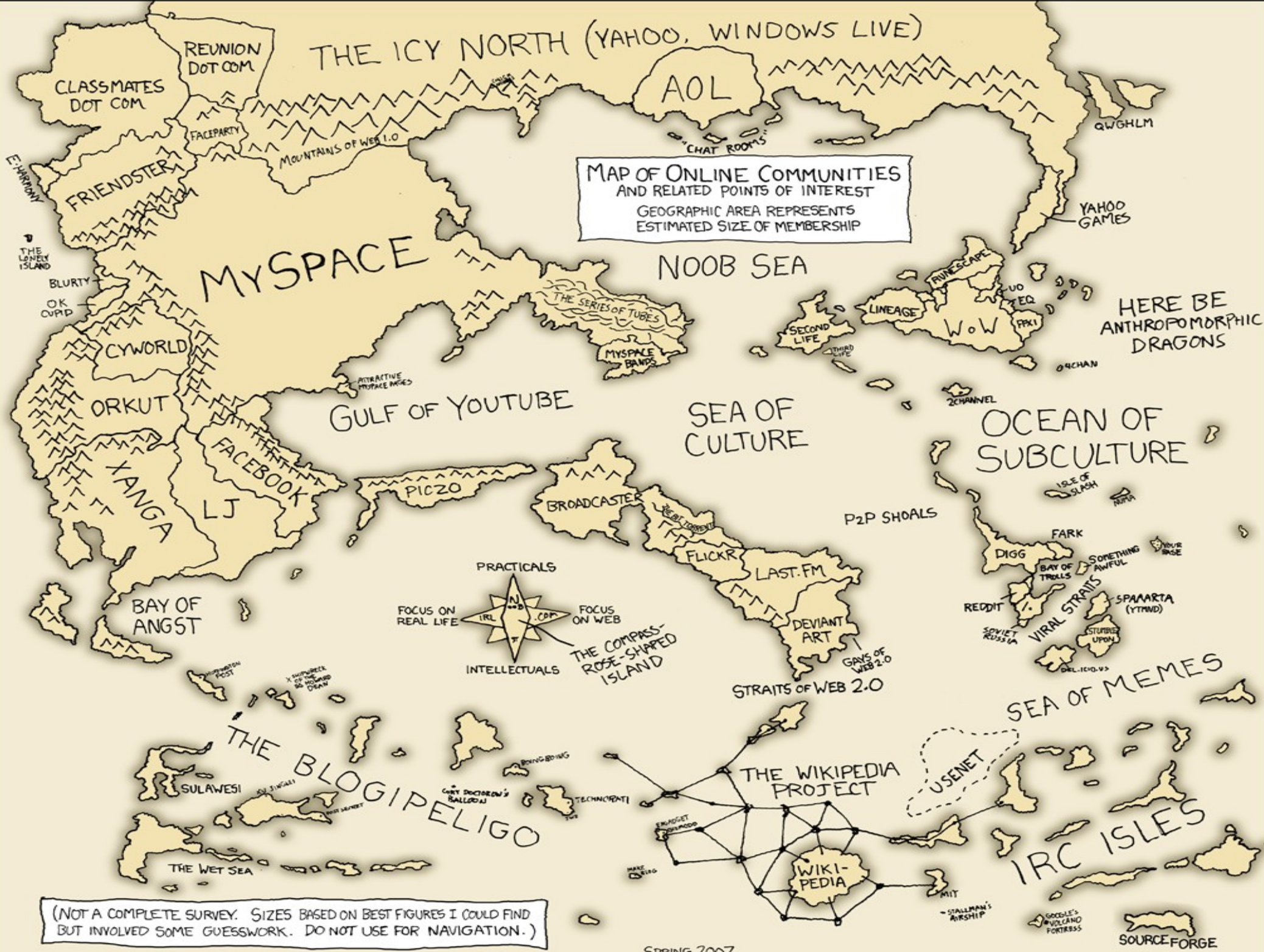
personal/private

public

commercial



Online social networks





personal/private

Privacy breaches

Centralized user data

Data mining

Targeted advertising

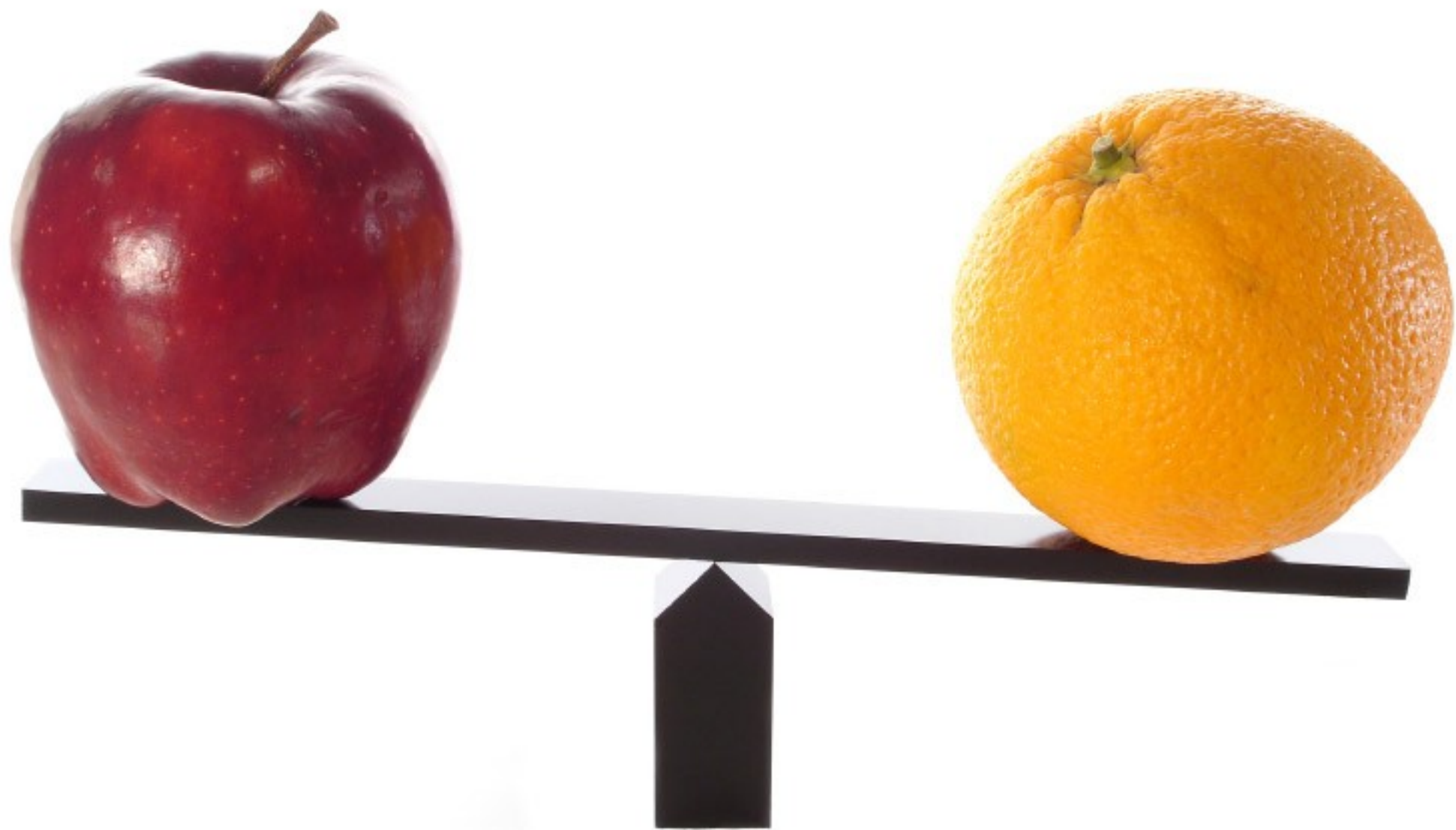


features

ambient

media





different

opposite

[help](#) [privacy](#)

owner-less

community-driven

distributed

ubiquitous

peer-to-peer

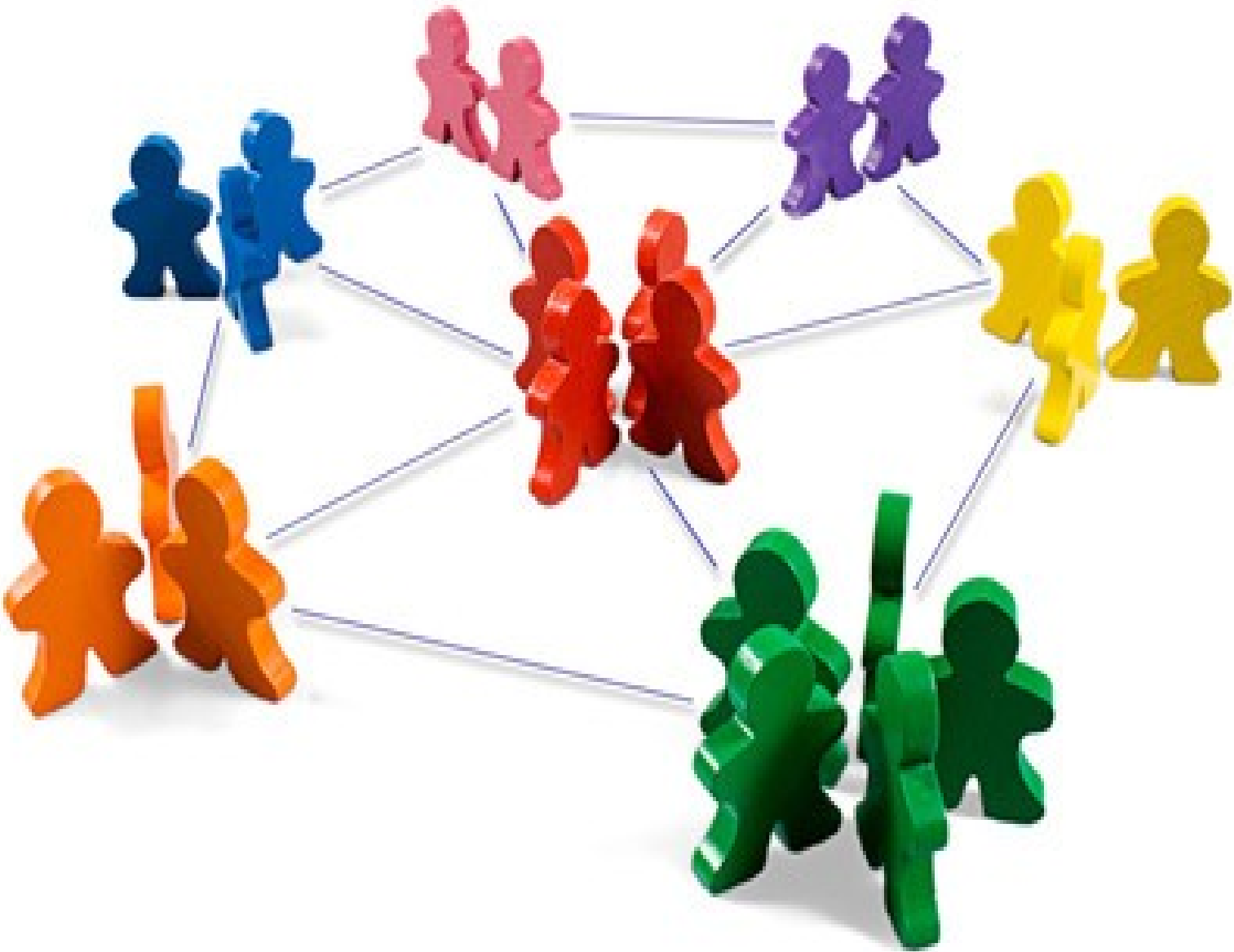
social networks

How?

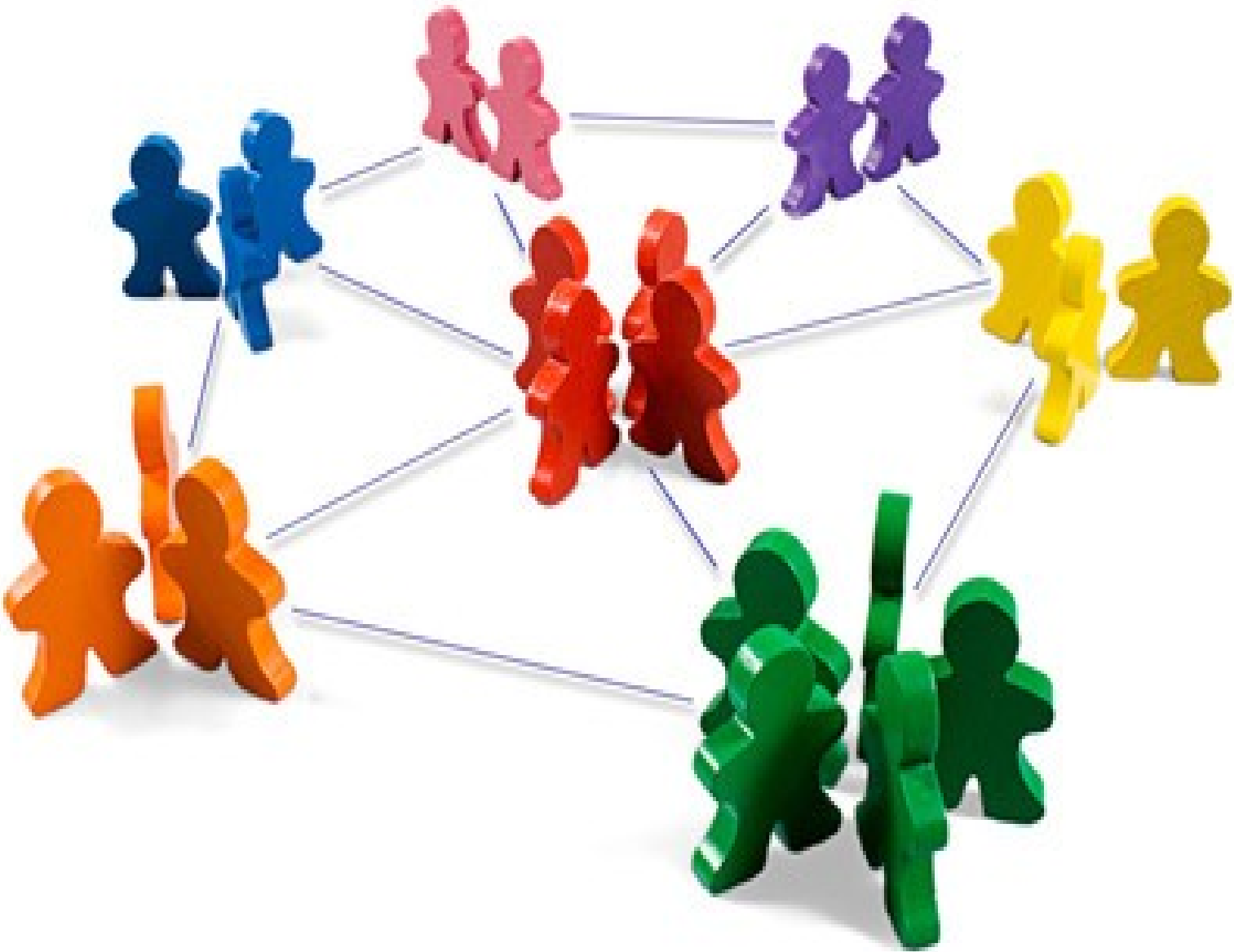
1/3

1: distribution

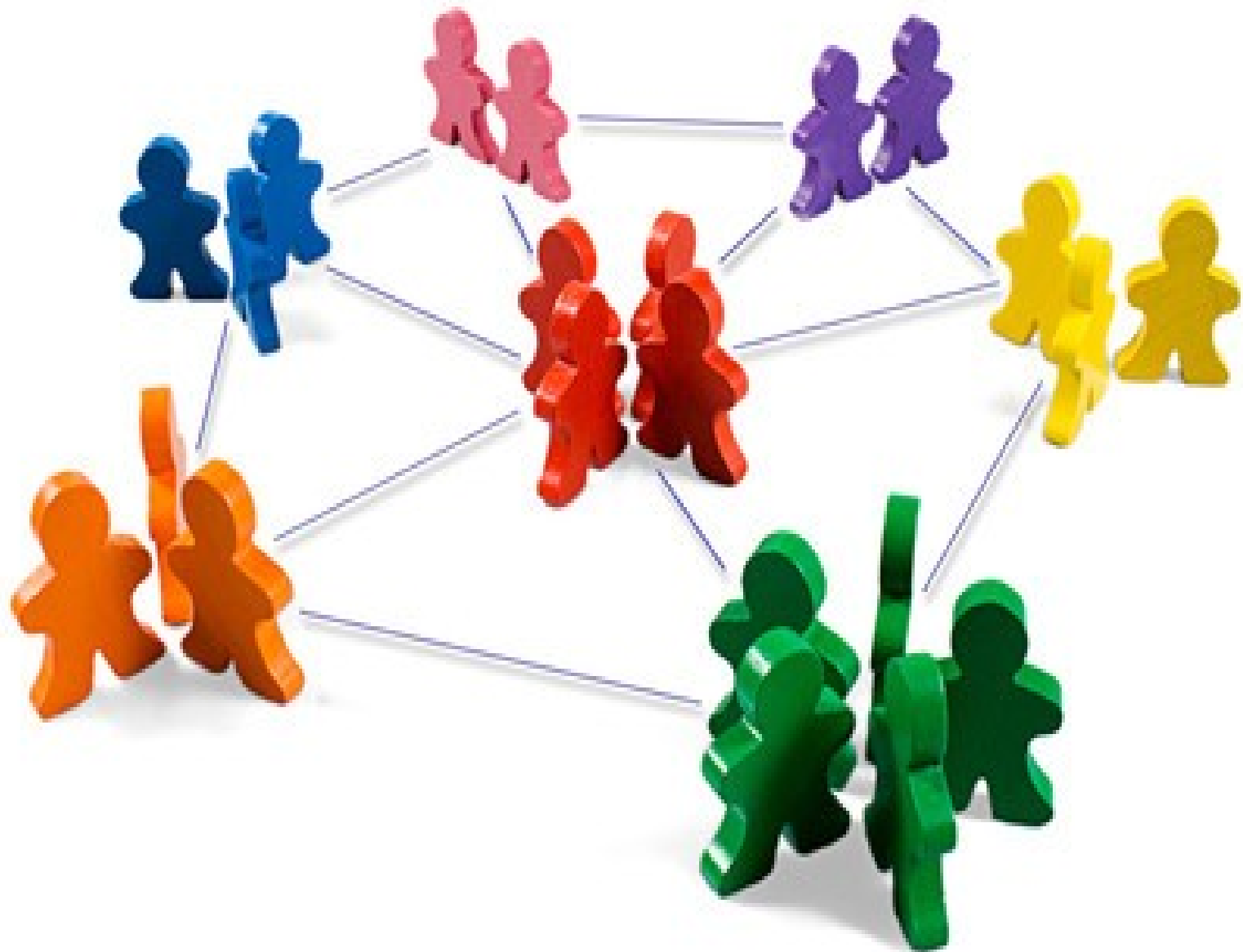
real-life



peer-to-peer



ubiquitous



How?

storage

online availability, bootstrapping, # friends,
geography

topology

lookup, social graph

asynchronous

add/remove/update

search

efficiency v. privacy

2/3

2: direct exchange



delay-tolerant

ubiquitous storage

3/3

3: access control



distributed



fine-grained

Goal: social networks with
privacy



putern vor allem in
nd durch das Militä
en Einzug, ab Mi

nisierte Gro...anlagen. Al
ließlich der... als Stand-alon

Alltag der Menschen erfass
(„Ubiquitous Computing“)

wann die entsprechende

Realisierung liegt meis

Ubiquitous Computing Privacy

Online Social Networks Privacy

Ubiquitous Social Networks

Privacy



www.peerson.net

Sonja Buchegger (T-Labs), Anwitaman Datta
(NTU Singapore), Doris Schioeberg (T-Labs),
Le Hung Vu (EPFL), Youssef Afify (EPFL),
Niraj Murarka (IIT)