

Conceptualizing locative social mobile networks

A brief look into personal locative media, mobile social networks,
and multiuser location-aware applications



Dr. Adriana de Souza e Silva
North Carolina State University

Department of Communication / The Mobile Gaming Research Lab

Location aware mobile technologies:

- shift our perception of space
- challenge the traditional logic of networks



Outline:

1. Locative-media: individuals and space
2. Social mobile networks: invert the traditional logic of networks
 - define social networks (Smart and Flash Mobs)
 - define locative mobile social networks (Hybrid Reality Games)
3. Interpersonal aware applications: social implications

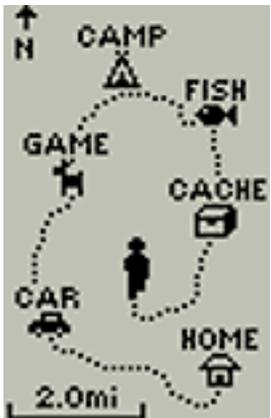
1. A new logic of space: Locative media in public spaces

1. Mobile technologies + location awareness (mobile positioning / GPS)

Garmin Forerunner



Geocaching (2001-2007)



HP Mscape (2007)



Audio Walks

34N 118W

Naomi Spellman et. Al



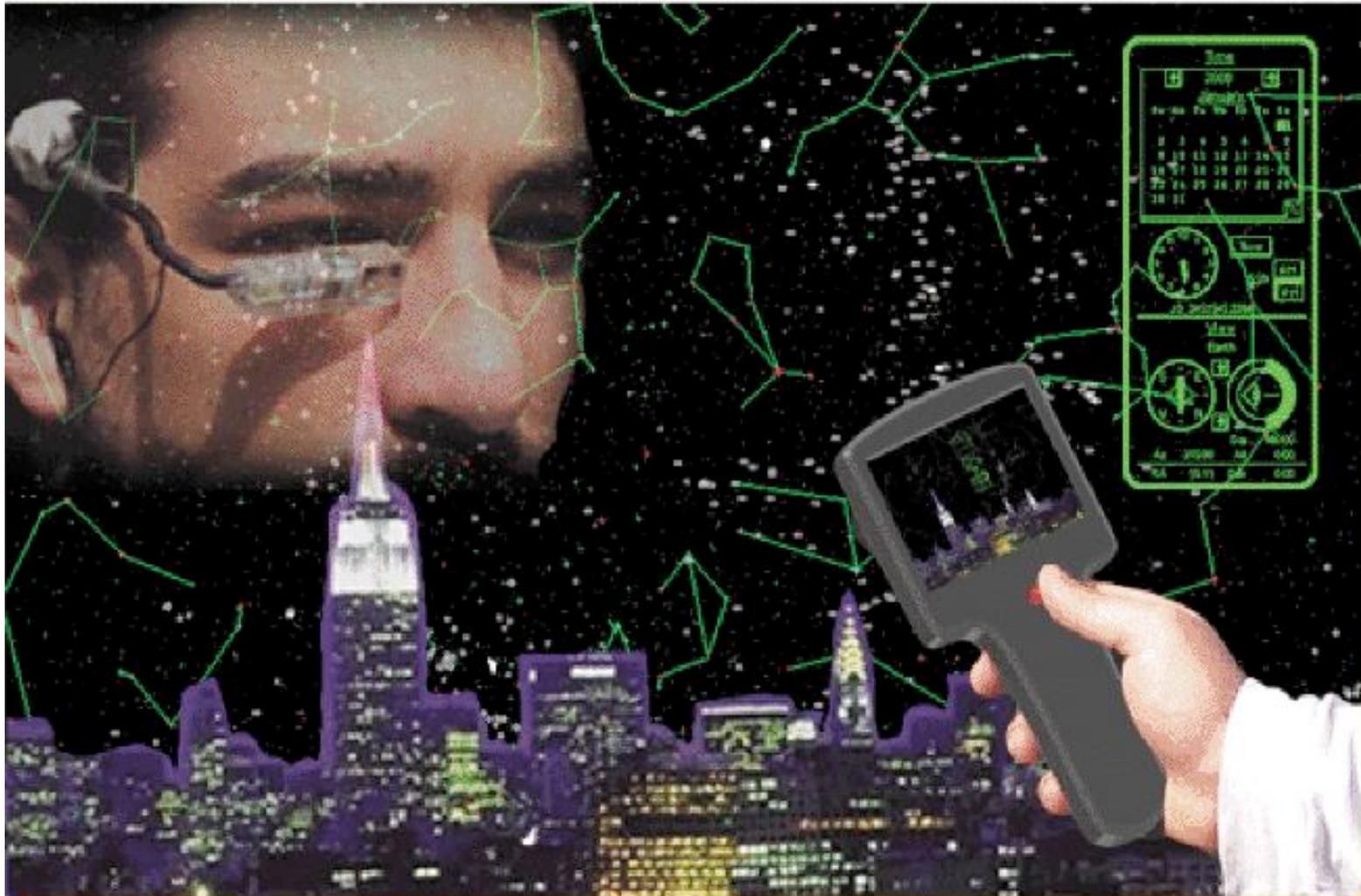
Trek

Mixed Reality Lab (Nottingham Univ.)



Worldboard, Jim Spohrer (1996)

Figure 1 Concept computers illustrating heads-up display and hand-held display overlaying information about constellations, with a virtual control panel



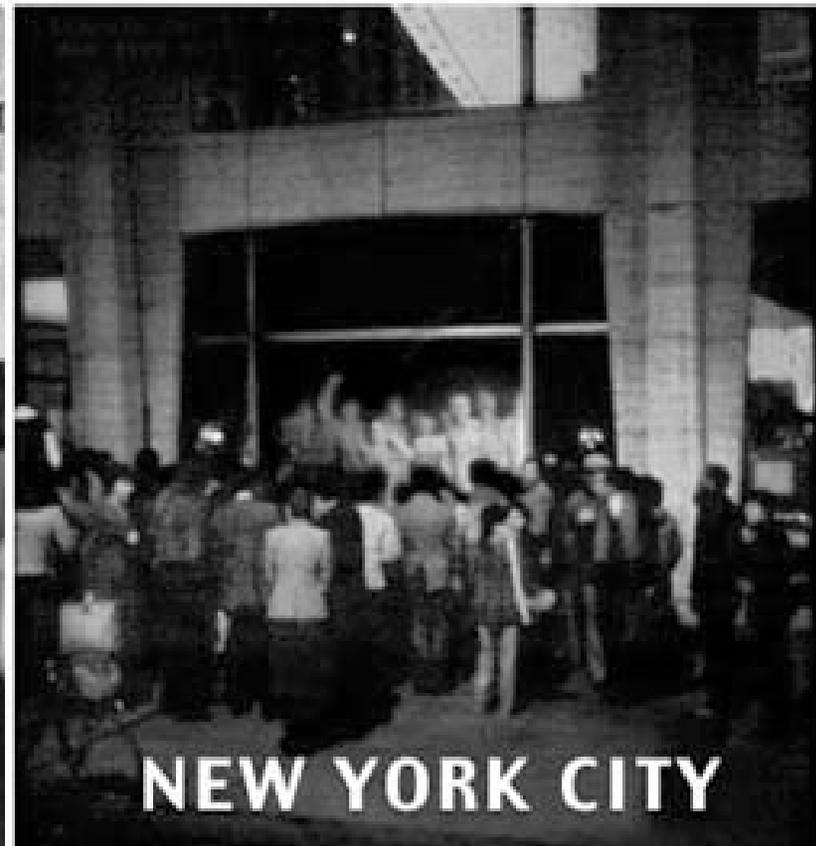
Worldboard, Jim Spohrer (1996)

Display technologies:

1. Head-mounted display glasses
2. Hand-held palm-sized displays
3. Projector that superimpose images on the environment



Hole in Space (1980), Kit Galloway & Sherrie Rabinowitz



Mscape

Audio Walks (34N 118W)

Garmin Forerunner

GPS: individual <--> space

+

Cell phones --> locative mobile social networks



Locative mobile social networks



2.1. Redefining networks

Logic of networks (spatial, nodes, paths)

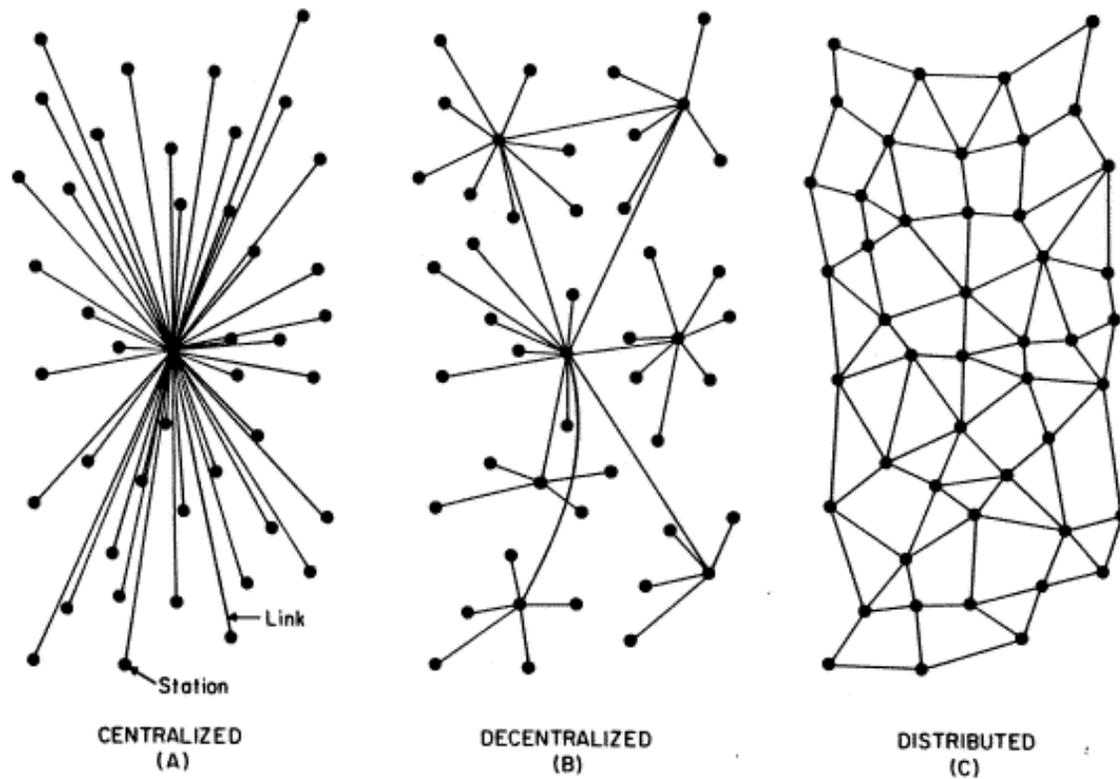


FIG. 1 – Centralized, Decentralized and Distributed Networks

2.1. Redefining networks

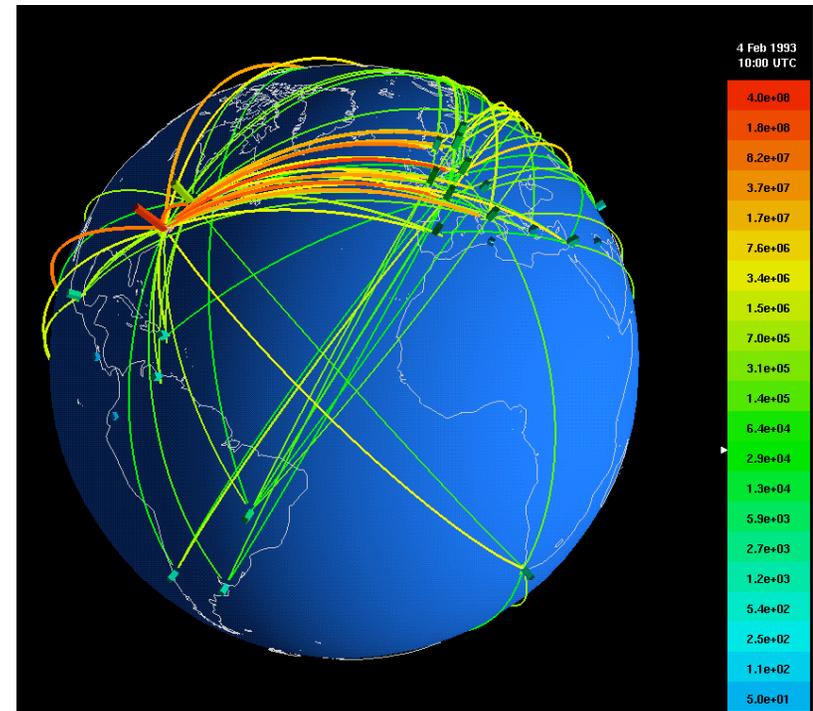
transportation networks
(Schilvelbusch, 1986)



2.1. Redefining networks

Internet myths (Couclelis, 2007): Death of geography

1. Dissolution of cities (urban spaces)
2. Reduced need for mobility (mobility)
3. Social spaces --> virtual (networks)



2.1. Redefining networks

Internet myths (Couclelis, 2007):

1. Urban spaces
2. Mobility
3. Networks

Mobile networks (mobile tech.)

1. Use of urban space
2. Nodes are mobile
3. Nearby nodes do communicate

2.2. Social mobile networks

Characteristics (Rheingold, 2002):

1. Formed in physical spaces
2. Organization takes place in digital spaces via mobile technologies
3. Ephemeral
4. Use cell phones as many-to-many means of interaction



2.2. Social mobile networks

Design configurations of wireless networks (Shirky, 2003):

1. Mobility
2. Ad-hoc connectivity
3. Ubiquity * (Fortunati, Castells)

Looking at new media as old media? (McLuhan)

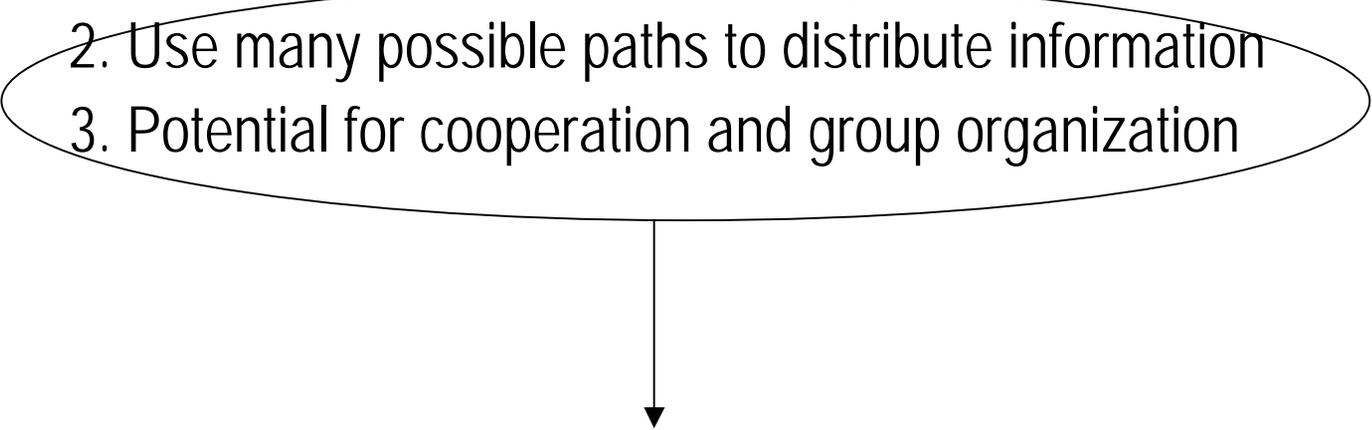
2.2. Social mobile networks

Design configurations of wireless networks:

1. Mobility + location**
2. Ad-hoc connectivity
3. Ubiquity

2.2. Social mobile networks

Characteristics of social mobile networks (Rheingold, 2002):

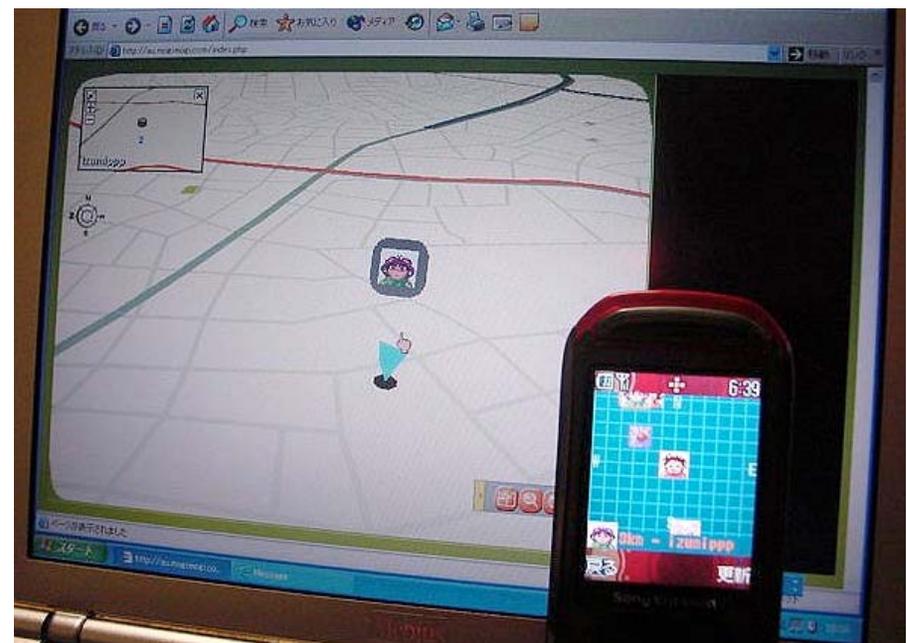
1. Operate in small units and deploy nimbly
 2. Use many possible paths to distribute information
 3. Potential for cooperation and group organization
- 

Locative-mobile social networks:

1. Mobility
2. Use of paths
3. Potential for cooperation

2.3. Locative Mobile Social Networks

Hybrid reality games:
Vs. MUDs and MOOs
vs. Flash and Smart Mobs
vs. Physical social networks



Mogi, 2003-2007

2.3. Locative Mobile Social Networks

Alien Revolt (Brazil, 2005)



Botfighters (Sweden, 2001-2005)



Redefining space and networks:

- Mobility paradigm (Sheller & Urry, 2006)
- inverting the logic of networks
- Screen as a public and collaborative space

3. Social implications

1. Beyond games (sociability, education)

ImaHima (Japan)



Savannah (UK)



Frequency 1550 (Netherlands)



3. Social implications

Characteristics of new logic of networks:

1. Occupy the city space
2. Each person becomes the node of the network
3. Movement of each node affects all others

“Locative technologies change the concept and the structure of our public spaces, transforming them into an emergent, rapidly evolving and highly reflexive feature of the co-development of location-aware technology to augment the experience of urban public spaces”. (Licoppe & Inada, 2006, p. 58).