perfomative interfaces

mixed reality environment

distributed systems and
parallel archives for the web

cast01

// living in mixed realities

netzspannung.org event //

September 21 – 22, 2001
Schloss Birlinghoven (near Bonn)

Conference on artistic, cultural and scientific aspects of experimental media spaces

netzspannung.org/cast01

cultural archives

interactive tv

awareness, memory space and knowledge discovery

tracking tracing vision systems

hypermedia formats

proceedings

connecting archives as data-bodies

Victoria VESNA, UCLA (USA)

The emphasis of our culture on the individual has produced a complex network that is at once interconnected and disconnected. With agent systems that allow autonomous existence and evolution, once data representing an individual is in the system, human presence is no longer required — an unanticipated evolutionary development of the Internet which strikes at the core of our notions of self, personal/social identity and human agency. And, while we can only speculate on the unintended consequences of these various data mining engines and autonomous agents (who often have AI behaviors attached), considering our ever shifting relationship to our sense of self, to our evolving network identity and to the larger electronic community is an urgent task. Now that technology is fast becoming completely ubiquitous, and will soon be integrated seamlessly into every aspect of our lives, problems of identity become ever more complex.

As we become increasingly aware that we are all part of a living technological organism composed of data and interconnected links, and that no one is exempt from issues of how virtual and physical worlds connect, we find ourselves having to readjust to a group consciousness amplified by decentralization of ubiquitous technologies. At this moment we are witnessing a growing disarray, confusion and overflow of information, overpopulation of people and devices. Our social networks are becoming decentralized by use of cell phones, hand held devices and other wireless gadgets. There are no social etiquettes established and at every moment, public spaces are regularly ruptured by interruptions and private conversations. With projects such as Expressive Messaging [1] and Multi-User Art Games [2] for mobile phones that promote even more use of this kind of communication, it is no wonder that ideas for Digital Shelters [3] emerge.

Social networks are not new. They are as old as the human race. After all, we are communication beasts, and our evolution can be traced through development of communication technologies. Centralized political systems such as the one that created the East / West Wall, have crumbled through the power of television and satellite systems. As telephones move from analogue, centralized stations to digital, decentralized cellular communication, we are collectively enacting this shift through our changing social patterns and behaviors. As our computers become miniaturized and in the palm of our hands, we finally get off our chairs and revel or fear the fact that we can indeed always be connected. But, this also calls for taking a closer look at the meaning of this shift. In all our enthusiasm for the newly found freedom of mobile devices, we may overlook the dangers that are part of the package.

With the move away from the screen, there is a need to turn back to the mapping of human networks that social sciences have been engaged in for decades. Biologists have for decades seen repeated patterns in nature, and by tracing our communication networks, and humans consciously or not, participate in pattern making. Cellular networks are a good example as they are normally thought of as hexagons on a big hexagonal grid, in which each cell has a base station that consists of a tower and a small building containing the radio equipment. A single cell in an analog system uses one-seventh of the available duplex voice channels. That is, one cell, plus the six cells around it on the hexagonal grid, are each using one-seventh of the available channels so that each cell has a unique set of frequencies and there are no collisions. Digital phones convert your voice into binary information (1s and 0s) and then compress it. This compression allows between three and ten cell phone calls to occupy the space of a *single* analog cell phone voice call. [4].

The question then is if it by coincidence that the cellular networks divide our cities in hexagons? The buzz of our communication devices, collapsed with human overpopulation (doubled in the last 40 years), is creating a veritable beehive of our societies. In all this frenzy, how do we find the time to ask ourselves questions about the accelerated information production? How many connections can a person handle as we extend ourselves beyond what we have been biologically designed to process? Can our bodies adjust to our becoming instruments, connecting via radio waves, or does our health suffer? How about the health of our planet? Currently there are over 8000 LEO (low earth orbit satellites) orbiting the Earth, and the space junk continues to grow around the globe with the decentralized, asynchronous, AI driven computing.[5] Perhaps this session on 'Networked Living / Connected Citizens' can offer us the space to address these issues, especially at this moment when next generation of cellular communication is being launched [6]

Notes:

See Expressive Messaging on Mobile Platforms by Per Person et al, part of this session.

See: IKI-IKI Phone: a Multi-user Alife Game for Mobile Phones by Christa Sommer et al, part of this session.

See: Digital Shelters by Pedro Sepulveda-Sandoval, part of this session.

See: http://www.howstuffworks.com/cell-phone.htm

Because the satellites orbit so close, they must travel very fast so gravity won't pull them back into the atmosphere. Satellites in LEO speed along at 17,000 miles per hour (27,359 kilometers per hour)! They can circle Earth in about 90 minutes.

See: http://www.thetech.org/exhibits_events/online/satellite/4/4a/4a.1.html

To provide true homogeneous worldwide wireless coverage with no gaps, LEO (low earth orbit) satellites are increasingly being launched. These LEO satellites orbit the earth in high speed, low altitude orbits with an orbital time of 70-90 minutes and an altitude of 400 – 700 miles. Since LEO's are not geo-synchronous, they are forced to fly complete orbits, and thus many must exist to guarantee every area is covered by at least one satellite at all times. Therefore, call handoff is executed when the satellite moves, not when the person moves as it is with ground-based cellular systems. See: http://www.leodotcom.com/

netzspannung.org/tournal/spectral

Friday, September 21, 2001, 10.00 – 19.30

Opening Speeches
Keynote: Bill Buxton
Theme 1: Understanding Mixed Reality?
Spaces of emergent Communication
Keynote: Hiroshi Ishii
Theme 2: The Information Society Landscape
New Formats of Expression
Theme 3: Networked Living / Connected Citizens
Keynote: Natalie Jeremijenko
Theme 4: netzspannung.org
From Digital Archives to Mobile Units

Saturday, September 22, 2001, 10.00 – 19.00

Keynote: Roy Ascott
Theme 5: Tools and Strategies for
Intermedia Production
Theme 6: Performative Perception
The Body as Instrument
Keynote: Manfred Faßler
Theme 7: Media Art Education
Teaching New Media
Digital Sparks and
New Media Curricula / Awards

Sunday, September 23, 2001, 11.00 – 12.30

Resumee: Phoebe Sengers & Maia Engeli
Auditorium Kunstmuseum Bonn
Friedrich-Ebert-Allee 2
53113 Bonn
Open to the Public

Host:
MARS – Exploratory Media Lab
Fraunhofer – Institut Medienkommunikation
http://imk.fraunhofer.de/mars

Fraunhofer IMK Institut Medienkommunikation
Bundesministerium für Bildung und Forschung
European Commission

ISSN: 1617-6855, german /1618-1379, english (Print)
1617-6863, german / 1618-1387, english (Internet)