

Inventing Communities of Communication

Research Day Presentation

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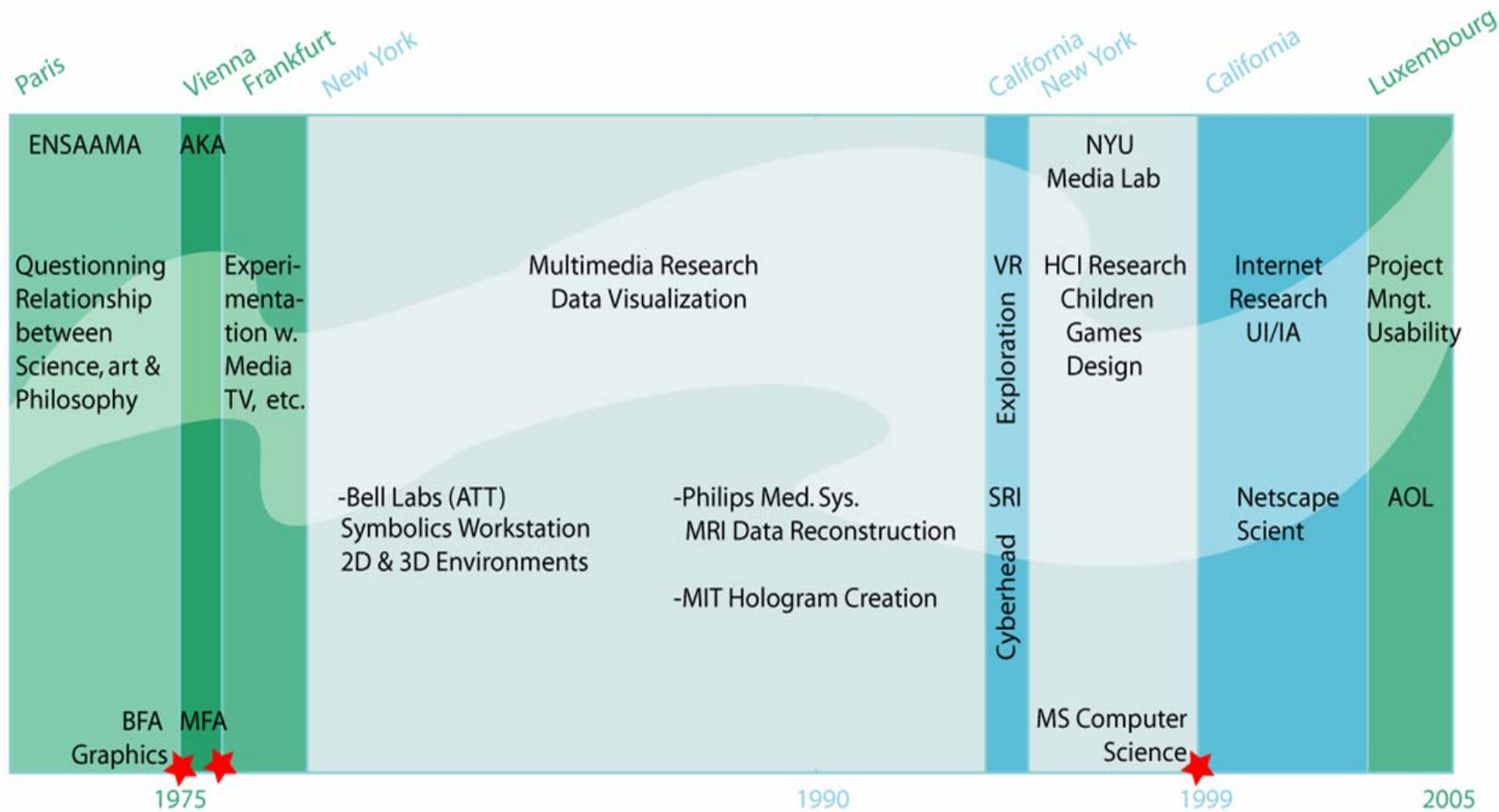
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A Few Things about Me: Selected Activities and Topics

A Few Things about Me: A Cross-pollination of French, American and German Cultures



About the Problem: Statement, Relevance and Approach

About the Problem: Statement

- Humans are remarkably skilled at using **subtle cues** about the presence and activities of others to govern their interactions.
- However such **coherent interaction** is difficult to achieve in online environments.
- How could we translate over networks the interaction of groups of people that intermingle coherently and productively in the physical world?
- How could we **transpose into the digital world the cues** we gather and assemble, like a puzzle, in a face-to-face **physical interaction**?
- What cues should be selected and how to represent them?

About the Problem: Relevance and Current Research Highlights

- **Social translucence concept, Erickson and Kellogg, 2000; IBM Watson; Emphasize three characteristics: visibility, awareness and accountability, this system is based on graphical interface and part of IBM's Babble system.**
 - http://www.pliant.org/personal/Tom_Erickson/st_TOCHI.html
- **Persuasive Computing, Fogg and Tseng, 1999; Stanford University. Propose three new conceptual frameworks for better understanding the elements of computer credibility: Credibility types, credibility evaluation errors and strategies for evaluating credibility**
 - http://captology.stanford.edu/Key_Concepts/Papers/CACMCredibility.pdf
- **Interest Maps, Liu & Maes, 2004; MIT Media Lab. Identity and Taste-based Recommender. Harvesting Social Network Profiles for Recommendation.**
 - <http://web.media.mit.edu/~hugo/publications/drafts/BeyondPersonalization2005-interestmap.pdf>
- **Visualizing conversation, Judith Donath, 1999; MIT Media Lab. Studies of avatars in chat circles and Looms. Captures of message and content through categories. Problem of evaluation criteria: What makes a conversation better?**
 - <http://judith.www.media.mit.edu/papers/VisualConv.HICSS.html>
- **Audio, haptic (touch-based) and multimodal Interaction research, S.Brewster, Glasgow Interaction Group GIST, 2005. Explore the use of non-speech sounds (things like music and sound-effects) and how they can be used to improve human-computer interaction.**
 - <http://www.dcs.gla.ac.uk/~stephen/>

About the Problem: Proposed Approach

- Create a **conceptual framework** for new models that will allow us to intuitively interpret such cues and to concentrate on the **high-level design** of such interaction interface.
- Focus on the complex concept of trust and credibility in human communication.
 - Trust** denotes “**dependability**”. It is addressed with mathematical models for seeking and revealing information
 - Credibility** denotes “**believability**”, a combination of expertise and trustworthiness. It remains a difficult notion to capture one that requires the input of cognitive and social sciences.
- Explore cognitive and social sciences to open the field to future models for digital human communication.

About the Problem: The e-City Context

- The e-City goals are two-folds:
 - Give all citizens access to electronic information
 - Modernize the administrative infrastructure of Luxembourg city
- Examples of directions to follow:
 - Representation of a chat room: Analysis and visualization of **on-line persistent conversations**, and the text they generate, can play an essential role in providing a visual thumbprint and **graphical representations** to convey a sense of the participants identities and behaviors and get an idea of the atmosphere and style of a group.
 - Online conversations in reel time between a city agent and a citizen: Organization of the web space to provide visual, tactile, and possibly sonic **mental pictures** of the community and of the interactions between its participants.
 - **Customization & personalization**: Categorization of people's interest and profiles to allow for recommendations and group acceptance.

Thank you 😊