Act it! How to design interaction patterns “beyond the desktop”

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RESEARCH QUESTIONS

The **investigation of the socio-technical factors** that contribute in **enabling social behaviour** and **collaborative activities in public spaces** by the means of **digital technology** based on the Ubiquitous computing paradigms.

1. How can be **the interactive artifacts** designed by having an **impact** on the **group/community dynamics** and in **promoting effective collaboration?**

2. How can we **design digital technology** in order to support both **perceptual-motor** and **intentional affordances?**

1. What is the **impact at the cognitive, perceptual-motor** and **emotional levels** on human activity?

2. From a methodological perspective, how can we **assess this effect?**

UBICOMP implications

- Shift of paradigm in HCI from **WIMP** to **POST WIMP** interfaces
- **New interaction styles** and **paradigms** based on Reality Based Interaction (RBI) (Jacob et al. 2008)
- The design process investigates the **forms** and the **meaning** of the interaction patterns
- Rather than embedding fixed notions of meaning within technologies embodied interaction is based on the **understanding that users create** and **communicate meaning through their interaction with the system** (and with each other, through the system). (Dourish, 2001)

SCENARIO DRAMATIZATION

- The situated and participative enactment of a scenario allows participants "to exercise reflection-in-action"

- The active engagement of the design team and users in the design process and decisions.

- The set of interaction patterns, as well as the form and the meaning of input and output, have to be designed from scratch (since nothing similar exists).

USIAlumni Faces

- USIAlumni Faces is an interactive installation that projected a digital “yearbook” (i.e., photos of the alumni organized by year and faculty) onto a large public screen.

SCENARIO DRAMATIZATION

This **first** session aimed at assessing:

- the definition of *gesture patterns*,
- the understanding of *perturbing environmental factors* (i.e. elements that can affect the interaction, such as light),
- and the *technology setting* (e.g. the correct positioning of the sensor recognizer).

In the **second** session we observed:

- the *ease of understanding the interaction model behind*,
- the *intuitivity of the input device,*
- and the *emergence of social behavior*.

USIAlumni Faces

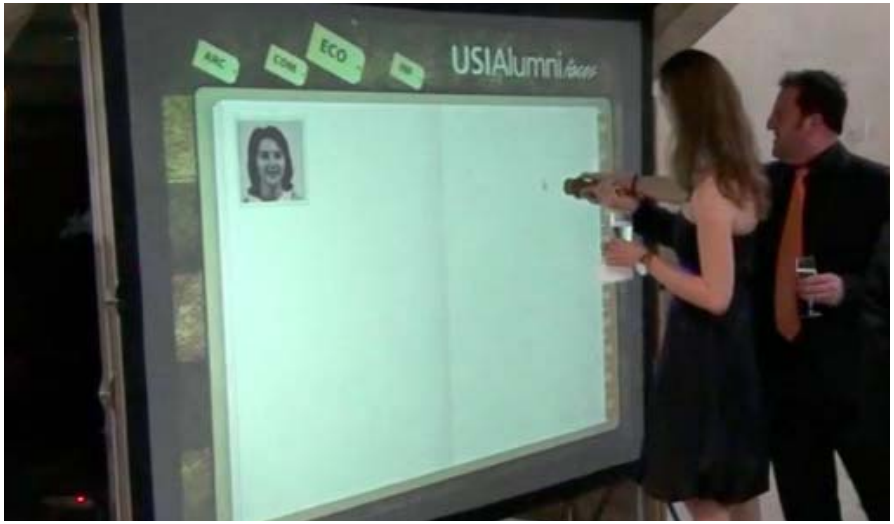
THE EVALUATION:

Observation during the USIAlumni event (the session was video recorded): 200 people ca.

FINDINGS:

1) **Gesture-based interface support the natural diffusion of interaction patterns** in public spaces through the observe-and-learn model;

2) **Sensory-motor patterns aid social interaction in public**, as they act as conversation starters between both strangers and acquaintances.



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