

Using the **think aloud** for affective evaluations in the lab

A work-in-progress

Mina Vasalou
Intelligent Systems and Networks Group
Electrical and Electronic Engineering
Imperial College London, UK

Tanja Bänziger
Geneva Emotion Research Group
University of Geneva

Humaine WP10 Workshop, November 6-8, Vienna

What is the think aloud

- A verbalisation 'saying what you are doing'
- Speech genre think aloud protocol for usability studies (Boren and Ramey, 2001)
 - Dyad participant and facilitator
 - Listener (facilitator) and expert speaker (participant)
- Training prior to participation
- A video example

Humaine WP10 Workshop, November 6-8, Vienna

Purpose of the study

- Using the think aloud as a concurrent method for evaluation in the lab
 - Does the think aloud allow users in the lab to be expressive?
 - Can a usability expert draw information about the user's experience (along with the performance metrics often collected)?

Humaine WP10 Workshop, November 6-8, Vienna

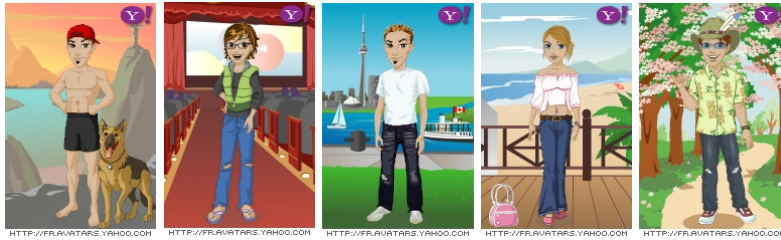
Motivations

- Part of the usability lifecycle
- Mobility of technology lends itself to the lab e.g. web applications
- Feasible solution
- Think aloud does not interrupt the user's task
- Triangulation with other methods
 - *E.g. users' post experience self-reports (interviews, questionnaires)*

Humaine WP10 Workshop, November 6-8, Vienna

Study

- Social computing web application 'Yahoo! Avatars'
 - Customisation
 - Social networking



Humaine WP10 Workshop, November 6-8, Vienna

Who participated

- 20 users
- Ages 20-40
- Novel users
- Non psychology students
- Fluent French speaking

Humaine WP10 Workshop, November 6-8, Vienna

Tasks

- Two scenarios
 - Rehearse a first time date while using Yahoo! Avatars
 - Surprise your mom with Yahoo! Card announcing your joint holiday in a Greek island

Humaine WP10 Workshop, November 6-8, Vienna

Coding the data

- Audio, video and screen capture recordings
- Usability problems (performance)
 - ‘Something happened onscreen that will not allow me to efficiently complete my task’
- User experience
 - ‘None of the faces look like me...(sigh) but it will do’
 - ‘I selected this haircut (laugh out loud)... yes this haircut is funny’

Humaine WP10 Workshop, November 6-8, Vienna

Coding the data (cont.)

- Moments were selected by:
 - What was happening on screen
 - User describing the problem or experience
 - Non-verbal information given off by the user (face and voice)
- 320 moments in total

Humaine WP10 Workshop, November 6-8, Vienna

Expressivity in the lab

- Does the think aloud allow users in the lab to be expressive?
 - Ongoing rating study for non-verbal expression in London
 - De-contextualising data
 - Expressivity task (Buck)
- A video example 'a user who likes the choice she made'

Humaine WP10 Workshop, November 6-8, Vienna

Usability expert judgment

- Does a lab setting allow a usability expert to draw information about the user's experience?
- Methodological problems with non-verbal expression
 - Analysis has to go beyond expression by looking deeper into context
 - A video example 'a user who has earlier selected a gorilla while he was zoomed out. His impression was that the animal feature didn't work'

Humaine WP10 Workshop, November 6-8, Vienna

Some early examples of user experience

- Can a usability expert draw information about the user's experience?
 - Avatar features that were perceived as being fun used to send intimate messages
 - Users projected their persona onto the avatars e.g. choosing similar faces or 'smiling' faces that reflected their mood
 - Personal preferences were used as a guide for choosing options e.g. romantic place users would choose in real life; default shoes options "a reason for not using Yahoo! avatars"
- How is value measured in this context? What is important for Yahoo! designers to know?

Humaine WP10 Workshop, November 6-8, Vienna

And a connecting note to other work...

- Self-awareness in CMC
 - Perceived similarity with one's avatar correlates with increased private self-awareness
- Patterns of usage that may increase participants' perception of similarity

Humaine WP10 Workshop, November 6-8, Vienna

Early conclusions

- Participants used the think aloud in a different way than intended and verbalised preferences, opinions and emotional experiences
 - Tasks and quality of interface?
 - Extended think aloud and increased expression
- Think aloud invites social interaction and with caution...
 - Appears to promote expression
 - Appears to offer insights on user experience

Humaine WP10 Workshop, November 6-8, Vienna

Early conclusions (cont.)

- Ongoing work
 - Rating study investigating expressivity in the lab
 - Checklist of methodological issues ‘when we as experts have to look beyond expression and use context to make our interpretive analysis’
 - Qualitative analysis of user experience

Humaine WP10 Workshop, November 6-8, Vienna

