

Using Videogames as Research Instruments

Questions & Answer session
10am – 10:30am

10 minutes each (Papers 1-3)

(Slide 3)

Paper 1: Carson Reynolds: *Ethical Aspects of Video Game Experiments*

- *How valid is to use video games in experiments as way to put the user at ease?*

Video games are a useful mechanism to put participants at ease; whether this is valid or not depends on exactly what they are being put at ease with. Is it something they would not consent to if they were fully informed?

- *Which recommendations would they give to the other participants?*

worst: let's get around the IRB

bad: caveat emptor

somewhat bad: privacy policy

neutral: pilots with peers

better: opt-out...opt-in

best: at any moment participants can withdraw data from the experiment.

- *What would they ask to the other participants regarding their experiments?*

What specifically draws you to video games as an experimental media?

Paper 2: Martin Jonsson, Zeynep Ahmed:

Wii Science - Teaching the laws of nature with physically engaging video game technologies

Wii Science – posed questions

- Did the children enjoy and learn from it?
- How would it differ from using with kids (k-12) or University students?
- Did the cultural aspects (Sweden & US) play any role?
- How were the experiments designed?

User Evaluation

1st User Study

- 3 users who support Help Desk Services
- Demo of service options
- 3 iterations of design and test
- Duration of 8 weeks

Outcome:

- Requirements for design modifications
- Emphasis on ServiceBot interactions
- Less interest in collaboration among customers
- Simple idea of a game for new hires
- Not convinced that 3D was an advantage over web portal



!! Coffee BREAK !!



Please be back ready to start at 11am.

Using Videogames as Research Instruments

Questions & Answer session (10 minutes each – Papers 4-8)

(Slide 3)

Proposed questions

- Why were these emotions being elicited?
- Can you compare games to other emotion elicitation techniques?
- Emotional outcomes of the different studies (e.g. child-robot interaction study)?
- Reasons and types of cross-cultural comparisons?
- If we want to induce a particular emotion, are there guiding principles that the paradigm offers as to features of the game?

Our questions for the workshop

Other social scientists/modelers using games?

- Other modelers invested in Cosmopolis (SOAR)
- Other social scientists looking at MMOG data and game communities (previous CASOS work, Williams group, PARC PlayOn group, Kefai, Pearce, & others)
- Other social scientists making games (Castronova, Kraut)
- Conceptual analogs to our work (Second Life, LambdaMOO, Facebook, Twitter)

How are our validation experiments proceeding?



Analysis of a reconstruction of Redden & Blackwell's military communication experiments in progress.

Paper 6: Suzanne de Castell, Jen Jenson:

The Eyes Have It: Measuring Spatial Orientation in Virtual Worlds to Explain Gender Differences in Real Ones



- **Methodology...?** *Expand on the methodology used, and how the experiments were designed to use videogames*

- Our approach involves “methodological bridgework”---finding and interweaving filaments of information, with differences in data types used to strengthen (rather than prohibit) their interconnection. Growing ‘connective tissue’ across research silos is the aim. How can humanistic, social, and scientific studies productively inform and develop one another?
- In this specific case, how can play-oriented virtual environments uniquely enable lab studies of spatial navigation and mental rotation that tellingly inform questions of whether the gender differences in spatial ability reported are evidenced in virtual world experiments that replicate the salient conditions of the MWM (the ‘gold’ standard’ test of gender differences in spatial ability)
- **Does game-based experience result in improved spatial ability (as measured by the VMWM)?** And, if it does, can we show evidence (Novice/Expert:Male/Female: N=16) sufficient to challenge F<M findings? (And, if so, could that kind of experiment, methodologically, help us adjudicate between biological and cultural explanations for gender differences?)

- **Other Q’s:** *How to ensure subjects take the Virtual World seriously? And how were the experiments designed to use videogames?*

- *Answers to these 2 are related: Play, paradoxically, affords the same levels and kinds of engagement and attention and effort as ‘serious’ activity does. Incentivising successful performance through ‘prizes’, and using a friendly, fun-focused task completion environment, in this case of a fun-fair sideshow in the context of a larger play-oriented virtual world has our subjects fully engaged, as our video-data confirms. Game-context affords high attention, effortful participation, thus strong assurance that we are measuring spatial ability at its limits.*

- **Novice vs. expert:** *How to distinguish between novice and expert players? And to account for previous game experience?*

Prior to their VMWM use, participants were asked to fill out a survey about their online & offline gaming (including self-identified novice/expert status), as well as answer questions about their childhood experiences with toys and sports (as per Voyer et al, 2000). We also monitored & recorded, with a/v and eye-tracking, participants’ ‘free play’ in either WoW or SL. These gave us several different measures beyond the experiment itself to assess participants’ levels of expertise – *and to begin to disentangle expertise and gender in VW play!*

Questions

How and why can video games be used to solve interface design problems in non game related software:

- Differences between a program like Microsoft Word and WoW
- Environment outside of a corporate one where something like fun can also be taken into consideration
- Large and enthusiastic community
- Themes common in games: illusion of control (within a set of given rules) and an impact on the world
- “no one knows how best to make an interface than someone who uses it day after day after day. We play our games a lot, but we can never play them as much as our fans do.” - Soren Johnson
- Games are highly interactive and the UI is important to the success and playability of a game
- Online games by their nature encourage cooperation amongst their players, which builds a thriving community
- Selfish reason: Fun

Paper 8: Marco Pasch:

Video Games as Research Stimuli to Study New Ways to Assess User Experience

Questions given in the review process

How do other researchers in the area see the use of video games?

What is the current status of the validation studies?