Better Than Life; testing techniques for an online audience to influence and participate in a live performance

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Abstract. This work introduces the mixed reality show Better Than Life, testing techniques for an online audience to influence and participate in a live performance.

This show combines aspects of online multiplayer game, live theatre and reality television. Participants described it as immersive theatre, Alternate Reality Game (ARG) and Live Action Role Play (LARP).

The aim is to provide a set of interaction mechanisms for the online users to affect the storyworld in real time, alongside the data gathering and analysis tools to assess the ludic/narrative effectiveness and user experience of those mechanisms.

1 INTRODUCTION

Goldsmiths worked with Coney, who make live games and Showcaster, who stream live events. Coney created a storyworld of a cult built around the clairvoyant Gavin, testing new recruits for psychic abilities. These tests were designed by Pan Studios, who worked alongside magician Jon Armstrong to create two classic pieces of stage magic, a substitution and a disappearance. The participants in the live studio space were the recruits, and the online participants were tasked with choosing which of them would lead the cult on Gavin's departure.

The interactions had to form a seamless part of the narrative; the user interface had to enable a feeling of participation in the live event and the storyworld. This meant a very fast signup and entry process, so users could start watching and interacting very quickly. This in turn meant that we had to gather user data on-the-fly with short simple questionnaires that didn't detract from the flow of the live experience. We also looked to engender a feeling of presence and embodiment through multiple avenues:

- Online users could navigate the space by switching cameras at will, discovering additional locations, actors and scenarios.
- They could influence the action by means of live chat and mouse movement.
- They could chat to each other (often sharing things seen on other cameras) to actors (influencing their script and costume) and to live participants after the show (piecing together a shared picture of the show).

2 LATENCY

At two points online users' movements were captured. During a group breathing exercise, mouse movements became a DMX value controlling the brightness of lights in the real space. In the finale we projected a spot of light that embodied each user, moving as they moused over the video. In both instances, we were faced with an extremely variable system latency, i.e. the interval between an event in the live space and its appearance in the viewed video feed at remote locations was completely unpredictable. This was down to several factors:

- The commercial servers used to stream the data were under pressure from the World Cup and Wimbledon 2014 coverage and associated live streams.
- The commercial infrastructure (ISPs) delivering data to users was under similar pressure
- Users were viewing through a variety of domestic, office, public and academic connections rated at differing speeds
- Users were using a variety of devices and platforms, from hard-wired desktop machines to handheld devices operating on wifi.

This meant that the gap between an online users movement and the resulting scenographic change was subject to a similar delay. When we asked for concerted action, the input was spread over a period of between 10 and 60 seconds.

3 PERFORMERS

The actor playing Gavin was improvising constantly, incorporating input from the online users, addressing the online and live groups individually and simultaneously, maintaining a complex narrative with other actors and performing a vanishing act.

4 DATA

We collected a very large data set from 70 live and 262 online participants over 8 shows in a three-week period. Some of this data has to be animated since it is too complex and multidimensional for conventional visualisation. The initial findings are that the online experienced a growing social presence and collective agency, a sense of sharing and doing, which exceeded that of the live participants.

5 CONCLUSIONS & FUTURE WORK

Going forward, we want to model much larger user numbers and implement the technology in adventure games for heritage sites that connect small groups of visitors with large numbers of online participants in homes and classrooms.