Shadows of Light: the Art of Slow Interaction

Alex May
Visiting Research Fellow: Artist in Residence at the University of Hertfordshire
alex@alexmayarts.co.uk

Shadows of Light is a digital artwork that explores the concept of “slow interaction” where the traditional intuition that an interactive system must respond immediately to a visitor’s presence and actions is turned on its head.

Keywords: slow interaction, interactive, video installation, artwork, digital art

1. INTRODUCTION

Shadows of Light is an interactive digital artwork that takes the form of a floor to ceiling projected image, which one or more participants stand in front of.

The work will respond to the participants only if they remain still for a short period of time, where they will begin to see their coloured silhouette slowly appear in the projected image as if they were being used as a stencil for paint being sprayed onto the wall in front of them.

The longer the visitor stays still, the more ‘paint’ is applied, causing it to drip and mix with the silhouettes of the visitors before them, creating an evolving record of all of the visitors who have stood in front of the work.

2. MOTIVATION

From the authors observations, a great many interactive artworks and experiences are based on a trigger and response design, where the participant is rewarded in some manner for performing some simple action such as waving ones arms around or moving objects or operating triggers. However finessed the outcome, there is little nuance experienced in this transaction, and minimal opportunity for the participant to creatively express themselves within the experience.

Participants become educated by these types of experiences, and learn to expect rapid gratification from them.

Although this brevity is not limited to interactive or digital art: research by the Metropolitan Museum of Art [1] has shown that the average time a visitor to their museum will look at any work of art is just 17 seconds.

3. DESIGN

Shadows of Light was conceived as an artwork that would reward a participant for slowing down and spending time with it, without demanding any particular action (other than their presence) and incorporate an evolving reward where the digital paint acts differently depending on how long they stand still.

The paint is a complex simulation where pixels will ‘dry out’ over time causing new paint to clearly drip over them, whereas ‘wet’ paint will tend to mix into the surrounding colours. While not entirely physically accurate, there is enough correlation to how real-world paint acts that participants can seemingly relate to it.

Each visitor is assigned one colour out of a limited pre-defined palette that is chosen by the artist, and is unique for each exhibition.

4. REACTION

When the work is exhibited, there is no instruction to visitors about how to interact with it. If a visitor walks past the work without stopping, they will have an entirely passive role in the work, though the artist still considers this a valid interaction.

Individuals that approach the work in an observer mode, specifically they stand further back and just look at the projection, end up appearing in the work, often to their surprise.

Once visitors grasp the nature of the interaction they begin to play and experiment with the nature of the work, either individually (some make ‘light angels’ by slowly moving their arms up and down to form wings), while groups have been seen creating shapes and even letters as messages for subsequent participants to encounter and enjoy.
5. TECHNICAL DETAILS

The work uses a Microsoft Kinect sensor for its built-in ability to recognise and track up to four people simultaneously.

The processing is done using OpenGL shaders running under Fugio, the open-source visual programming system designed by Alex May.

6. EXHIBITION HISTORY

The original version of the work was created in 2009 and exhibited at The Drawing Room Gallery in Portobello Road, London. Dancer Marja Koponen performed an improvised interaction with the installation, set to an original score by sound artist Martin A. Smith [2]. The original version used infrared lights and cameras, and didn’t feature the dripping paint system; instead it used flat colour that changed hue over time.

The piece was subsequently redesigned by Alex to feature the paint model, and replaced the cameras and lights with Microsoft’s Kinect sensor, which had come out in November 2010.

This version was first shown at Kinetica Art Fair in London in February 2011.

The work has subsequently been exhibited internationally, including at Tate Modern in 2013, and, most recently, as part of Alex’s solo exhibition in Calgary, Canada in February and March 2016 [3].

7. REFERENCES

