Time Lens – Interactive Art Project

Michael Kuetemeyer and Anula Shetty

Abstract

Time Lens is an interactive, multiplatform art project and a mobile App featuring a series of immersive panoramas documenting the rapid gentrification of an urban neighborhood in Philadelphia. Incorporated into these digital panoramas are the voices, stories, dreams and memories of members of the largely invisible homeless community.

A collaborative participation model is used to engage the community. We partnered with men from a homeless shelter to create photographs, videos and interviews of the neighborhood’s past, present and future. At the core of the project is the idea of home and community and what these terms mean to people in the neighborhood. What are the cultural treasures and invisible markers that are wiped away to make way for the betterment of a neighborhood. What are the stories that are lost forever? What traces remain behind?

Users can download the App on their mobile devices and then follow along in the actual location and experience both the past and the present, the virtual and physical worlds all at the same time. The goal of Time Lens is to bring people to a specific location to participate in a transformative experience of that space, to infuse media art into the geographical landscape.

Keywords

mobile app, interactive art, interactive documentary, social practice, augmented reality, gentrification, homeless, landscape

Introduction

Time Lens is an interactive multiplatform documentary art project and mobile app featuring immersive panoramas documenting the rapid gentrification of an urban neighborhood in Philadelphia. Incorporated into these digital panoramas are voices, stories, dreams and memories of members of the largely invisible homeless community. Users can download the app on their mobile devices and then follow along in the actual location and experience the past and the present, the virtual and physical worlds all at the same time. The goal is to bring people to a specific location to participate in a transformative experience of that space, to infuse media art into the geographical landscape.

The story of Chinatown North and Pearl Street is representative of the stories of change that are affecting many urban neighborhoods in the United States. At the core of the project is the idea of home and community and what these terms mean to people in the neighborhood. What are the cultural treasures and invisible markers that are wiped away to make way for the betterment of a neighborhood. What are the stories that are lost forever? What traces remain behind?

Time Lens experiments with the concept of experiencing multiple dimensions of a place. This allows audiences to question their own role in the ongoing transformation of a neighborhood. The project was developed as part of the Asian Arts Initiative’s Social Practice Lab and funded by ArtPlace. The Time Lens mobile app is retrieved from https://itunes.apple.com/us/app/time-lens-pearl-street/id706525884?mt=8

Project Background

Our work is an evolving combination of interactive documentary and socially engaged participatory media. One of our early inspirations is the work of video artist Janet Cardiff whose Video Walk projects (San Francisco MOMA 2001) try to merge the “virtual” and “real” worlds. By “lining up” video content with the architectural space, her videos match the perspective of the audience. Layers of real and recorded sound overlap, creating a rich and
ambiguous sense of space. In our location-based projects, we create works that explore urban spaces through multiple layers of time and community stories.

The questions we are interested in exploring as part of our process include:

- How do we explore the meaning of place and home in the context of change and the passage of time?
- How can we create explicitly place-based art that is deeply rooted in the communities and locations it documents?
- How can we facilitate, capture and organize community memories and histories so that we can create an entryway to learn about a place?
- How can new multimedia technologies like Apps, augmented reality (AR) and virtual reality (VR) be a platform for creative and community storytelling?

Implementation

We are interested in what Pablo Helguera, in his book *Education for Socially Engaged Art*, calls a “Collaborative Participation Model.” As we engaged in the process of creating *Time Lens*, we had to gather information about what the community wanted and establish a relationship of openness and trust, while also striving to create a work that we felt expressed our own vision for the project.

The themes of place, home, identity, disadvantaged populations, and forgotten histories resonate in *Time Lens*. The gentrification of the Pearl Street neighborhood is leading to the displacement of many residents, including the homeless who live in its alleys and who are served by the homeless shelter, Sunday Breakfast, which occupies a prime location in the neighborhood. Many of the homeless men have long been deeply connected to their location and community. The broader community and neighborhood development committee are frustrated by the very existence of the homeless shelter, in fact, because it reduces property values. However, when it is the homeless who are operating the cameras and asking questions about the future of the neighborhood, it changes the conversation.

We collaborated with men from the shelter to create photographs, videos, and interviews of neighborhood’s past, present and future. The men received training in photography, video production and creative non-fiction. Then we developed the App to link the stories to the specific spatial locations.

To bridge the gap between the virtual and the physical worlds, and to find a way to share the project with the community, we drew inspiration from a travelling cinema device that is still used in remote villages in India today – the Bioscope. It is a wooden box, the interior of which has pictures that are viewed through four circular holes. We are excited by the symbolism of the Bioscope as a dream-making machine of the past as well as the community-viewing interaction and experience it fosters. For the premiere of *Time Lens*, we created a solar-powered Bioscope video installation with four interactive iPad screens and viewing portals. This allowed for audience interaction and input with the project on the actual streets. It was incredibly moving to witness the special moments at the project launch – the homeless men experiencing and interacting with the final product of their creative efforts, as well as visitors and passers-by recognizing the men and talking to them about their stories.

Figure 2. Bioscope mobile video installation.

Figure 3. Collaborative Participation Community Workshops
Film scholars Patricia Zimmermann and Helen De Michiel have coined the term “Open Space Documentary” to describe participatory media experiments that are proliferating across rapidly evolving distribution platforms. They reveal how mobile devices, apps, and social media are liberating artists to explore new ways to frame community activities as creative practice and to weave them into a larger social fabric of history and memory.

**Technical Approach**

*Time Lens* expands and builds upon our previous locative media work, *Explore Hawai`i Volcanoes* [Fire Work Media 2014] and *Walk Philly* [Termite TV Collective 2008-15]. [1, 2] By adding the dimension of time and community engagement, we maximize the participatory potential of augmented reality and location aware mobile media technologies. Using a combination of GPS and physical landmarks, time-lapse spherical panoramic sequences (32 images) are captured sequentially in each location by a robotic tripod over a period of 3 years. Tagged onto the panoramas are community generated historical and social markers in the form of videos, interviews and photographs.

The Autoplay scripting function of the app creates an ability to script a path through documentation location to location along the street and also to the past or future of that location. Through the Autoplay function, a scripted narrative path can be woven into the space-time matrix of panoramas.

**Future Work**

In our future work we will continue the longitudinal study of the Pearl Street neighborhood in Philadelphia, broaden community involvement, broaden the project’s access and compatibility to include Google Android and build more interactive components. The *Time Lens* model will be further developed in additional locations to facilitate informed community engagement.

**References**


---

**Figure 4. Temporal Interferometry**

The project uses the dimension of time as way to experience a place. When panoramas of a specific location from different times are blended, it creates a lensing effect, a temporal interferometer, allowing insights into a location’s multiple temporal incarnations. On each location of Pearl Street, viewers can look at and reflect on the past, present and future.

**Figure 5. Scripted Spacetime Path on Pearl Street Philadelphia**

**Figure 6. Panoramas of 1219 Pearl Street, Philadelphia, USA - September 27, 2013 and February 11, 2014**