



Lucid Peninsula: DreamScope: An Interactive Physical Installation

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ABSTRACT

In this paper we present Lucid Peninsula, an interactive installation designed to immerse participants in a dreamlike, post-apocalyptic story world. The goal of the installation is to offer a way for people to experience the future through a physical interactive installation. To achieve this aim we designed and developed the interactive DreamScope device, while the Time's Up collective designed and built the physical installation. On one side with the Dreamviewer binoculars users will be able to see the world outside and absorb data relating to factors such as air quality, presence of plant and other life forms, etc. On the other side of the installation, the audience will be able to borrow mobile devices (Dreamcatchers) and venture into the actual landscape of the city, in order to 'catch' the dreams of the inhabitants of the peninsula, which are mixed with memories of the world before it was transformed.

Author Keywords

Interactive Installation; Physical Installation; Virtual Reality

ACM Classification Keywords

H.5.1 Multimedia Information Systems

INTRODUCTION

Lucid Peninsula is an interactive installation designed to immerse participants in a dreamlike, post-apocalyptic storyworld where changes to the Earth's atmosphere have led to the emergence of new species, conditions, and ways of life. Fragments of memories and dreams belonging to the inhabitants of the previous era still linger in this new world, hovering over certain locations. The Lucid Peninsula storyworld where the lucid dreaming takes place emerged from a future scenario planning activity undertaken by artists and designers from the FoAM and Time's Up collectives in June 2014. We worked closely with these artists to create the Lucid Peninsula interactive physical

installation. Lucid Peninsula is a part of Future Fabulators, an EU-funded project that aims to explore and prototype possible futures within a cultural framework. [1]

The goal of the installation is to offer a means for people to experience the future by bringing to life a storyworld the audience can interact with, reflect on, and interrogate with questions such as: Could I live in this world? Could this really happen? How would I adapt?

LUCID PENINSULA STORYWORLD

The Lucid Peninsula is a futuristic world that feels familiar, yet strange: an eternal twilight of dreamlike metaphors and shape-shifting beings. Environmental living conditions have radically changed and the search for green plants has become crucial for survival. The outside air is toxic: not immediately lethal, but requiring special gear and treatment after exposure.

PHYSICAL INSTALLATION AND DREAMSCOPE MOBILE APPLICATION

To give the public a chance to experience the Lucid Peninsula firsthand, we designed a physical installation and an interactive environment. A special device called a DreamScope, comprised of Dreamviewer binoculars and a mobile Dreamcatcher, will guide people in the discovery of this world. The equipment will be located in a special room, dedicated to the detoxification and recovery of air force pilots who sweep the peninsula in search of rare green plants and need to undergo a special purification treatment before they can fly the next mission.

We designed and developed the interactive DreamScope device, while the Time's Up collective designed and built the recovery room. On one side of the installation, the Dreamviewer binoculars will be positioned at a window so that users will be able to see the world outside and try to gauge the viability of venturing outside again, taking into account data such as air toxicity, availability of plants, other life forms, etc. On the other side of the installation, the audience will be able to borrow mobile devices (Dreamcatchers) and venture into the real streets of Glasgow, in order to 'catch' the dreams of the inhabitants of the peninsula, which are mixed with memories of the world before it was transformed into the dry and toxic Lucid Peninsula that it has become.

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Physical Installation

As long as people continue to travel to the Lucid Peninsula, a place to rest and recover before the next leg of the journey will be necessary. As travellers rest or sleep through the recovery process, the capacity to dream is vital: to be lucid, to share and live in dreams, is a necessity. Dreaming is an important part of life in this future world sustained by memories of a time when things were different.

The physical installation recreates this special environment with an air purifying machine, medical gear necessary for the healing process, a machine to archive dreams and memories, and the interactive DreamScope, comprised of the viewer and the catcher (explained in the next section).



Figure 1 - DreamScope Viewer



Figure 2 - DreamScope Catcher

DreamScope Mobile Application

Lucid DreamScope: Viewer

The Dreamviewer enables the audience to glimpse life in the Lucid Peninsula. The device is used by pilots in the recovery room to check outside conditions (temperature, humidity, visibility), make sure it is safe to exit the room, and find locations with heightened dream activity.

With the Dreamviewer, visitors can enjoy a 180-degree panoramic view of the outside world, as if they are looking through a window of the room. The 3D world depicts a desert-like landscape with orange sky and large red sun. The 3D landscape simulates the landscape outside the recovery room, highlighting buildings that the user can explore in the city. Users can zoom in on buildings in the landscape to apprehend more details of the structure. This is possible through the use of a Google cardboard virtual reality kit. [2] The software was built using the Unity game engine and receives input from the compass and the accelerometer in order to show the virtual environment of the Lucid Peninsula.

Lucid DreamScope: Catcher

With the Dreamcatcher visitors will discover the dreams of Lucid Peninsula inhabitants. A poster in the fictional recovery room alerts users that they can encounter and experience fragments of dreams through the mobile Dreamcatcher device. This device has an Android application built using the Unity game engine and it features image recognition to trigger the virtual environments of characters' dreams.

In order to retrieve dream fragments the visitor borrows a mobile device in exchange for an ID card at the front desk of the exhibition venue. Then a mobile phone and physical map of the surrounding area is delivered to the visitor, highlighting where the dreams are located.

When the visitor gets to a place where a dream is available, s/he will find a special icon (see top of Fig. 2) indicating dream presence and scan it. An interactive view of the Lucid Dreaming world appears on the screen of the mobile device.

By tapping the screen users can create circular viewing portals that show what the Lucid Peninsula world looked like at a different time. An audio narration recounts the dream mixed with memories from the dreamers. The dreams themselves focus on the past and how the world once was (our current world) and the nostalgia the present inhabitants feel about such distant times, mixed with stories of their present lives.

CONCLUSION

The Lucid Peninsula was successfully exhibited in Austria and Romania, in the context of the exhibition Intime Raume 2014 by IMA [3] and Future Fabulators exhibition by AltArt [4]. The diverse audience found the Dreamscope entertaining and thought-provoking. We would like to exhibit the Dreamscope interactive installation at the C&C in order to probe the audience through exposure to future scenarios as well as engaging them in a pleasurable, interactive and dreamlike experience.

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