Depth of Dream: Creative Inspiration from Lucid Dreams

CAO Zhihui, ZHANG Tingmei, SIT Sin Wun, RAY LC

School of Creative Media, City University of Hong Kong
Hong Kong SAR, China
jajaklee@hotmail.com, tmoi0715@gmail.com, qiaolisit.sw@gmail.com, LC@raylc.org

Abstract

Lucid dreaming can be a source for creative inspiration for its dreamer, because it instills out-of-the-ordinary, outside-of-the-box experiences, with connection to the subconscious realm. In this project, we collected 74 survey responses about lucid dreaming and studied how artists used lucid dreams as an inspiration-generating tool. Findings revealing that over 50% of the young participants have had lucid dreaming experiences, using them to empower their creative work. Representative dreams are then selected and transformed into videos shown in our installation. The findings obtained previously are reinterpreted into dream pieces in our artwork, the structure of which was designed based on the principle that different brain areas are responsible for distinct cognition functions. We developed the interaction system to allow viewers to switch between dreams displayed in 3 various channels, simulating the sense of control and awareness in lucid dreams. This work aims to shed light on the interplay among dreams, memory, and art, paving the way for an appreciation of the creative potential of human dreams.

Keywords

Lucid dreaming, artwork inspiration, brain cognition

Introduction

In our practical research, we developed a questionnaire to investigate how people experience and perceive lucid dreams. We seek to address several important questions:

- What are people's lucid dreams about?
- What emotional motivations are behind those naturally induced lucid dreams?
- Can we use lucid dreams as artistic inspirations?

Figure 1. Installation at the Exhibition

Based on the findings of these research questions, we created an installation that simulates the sense of awareness and control in lucid dreams. 5 different dream pieces each in 3 distinguished channels - 15 dreams in total - are displayed in the names of rational (left TV), emotional (right TV), and general (projection in the background) dreams. The audience can switch dreams on the left and right TV by changing their left and right-hand positions accordingly.

We collected over 40 lucid dreams from the respondents and transformed 5 of them into our installation art piece with AI-generation techniques. Real experiences from our group members comprised the rest of the dream's contents.

Methodology

Bibliographical Research

Objective: to understand the definition and basic working method of lucid dreams and to discover how other scientists and artists dig into this specific field.
Method: read and gather information online and in the library.

Lucid Dream Data Collection

Objective: gather lucid dream information like dream content to dig out the psychological motivations behind and eventually transform such information into real artwork.
Participants: volunteers gathered online and in real life.
Method: develop and spread an online questionnaire to people around and through social media channels, and analyze the information gathered.

Findings and Results

We learned that lucid dreaming is a unique state of dreaming that constitutes a hybrid state of consciousness – one being both waking and dreaming. [4] In the state of lucid dreaming, the dreamer becomes aware that he or she is dreaming. [2] Studies have shown that around 55% of people have had such an experience. [3] This is consistent with the results of our questionnaire, which is that about 58.1% of the respondents have had lucid dream experiences.

We analyzed the information and found 5 most common topics mentioned by our respondents: being chased, flying or unusual movements, strange or eerie scenarios, prophetic or coincidental events, and work or school-related stress.

We collected responses in lucid dreaming from 36 individuals with creative backgrounds. 7 of them reported that they had experiences in discovering ideas from lucid dreams. 2 of them mentioned specifically that lucid dreams have inspired their animation or illustration works, while 1 reported receiving inspiration for writing.

Design

We found that some of the questionnaire participants were able to control their lucid dreams to a certain extent, so we created an interactive installation that would allow the audience to control the dream videos. They can switch between different dreams and explore various combinations on their own.

3-Channel Dream Device

We designed the system in 3 channels, with the left and right TV screens to mimic the rational and emotional areas of the human brain, while the projection in the background demonstrates the general dreams selected by reconstructed by the hippocampus from day-to-day scenarios.

Figure 2. Overall Visual Effect and Interaction Design

Left TV Channel - Rational Vision

Taking the rational thinking represented by the left brain as a starting point, a strong sense of order is created visually by using geometric figures, lines, and symmetrical structures superimposed with dream elements. Part of the content is inspired by the paintings of surreal painters such as Dali and Magritte, who used lucid dreams as a source of creative inspiration. At the same time, surrealist elements such as symmetrical elevators, broken lines in space, and mosquitoes are used for dream visual creation.

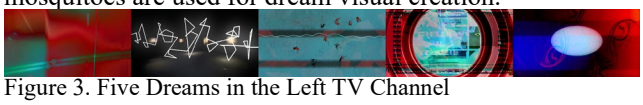

Figure 3. Five Dreams in the Left TV Channel

Right TV Channel - Emotional Stimulation

With the right brain symbolizing emotional thinking, 5 dreams are selected to make AI-generated videos based on the analysis of 40 lucid dream descriptions. For instance, “Flight from the Phantasmal Chase” shows the fear during the chase, “A Dream of Earth's Crisis” contains the worry about the world crisis, and “The Filled Washing Machine: A Nightmare” reflects the horror of the alienation of daily things.

Figure 4. Five Dreams in the Right TV Channel

Background Channel - General Dream Simulation

General dreams are the reproduction of memories of real-life scenes after being screened by the hippocampus. Based on that, we designed effects such as paper textures, light leaks of film, and hand-drawn sketches, conducting disjointed splicing of these with the content filmed in real-life scenes.

Figure 5. Five Dreams in the Background Projection

Interaction Design

We used a MacBook Pro camera to capture the movements of the audience's hands. With Mediapipe in TouchDesigner, the system can identify the positions of the audience’s left and right hands, the images will switch on the left and right TVs respectively.

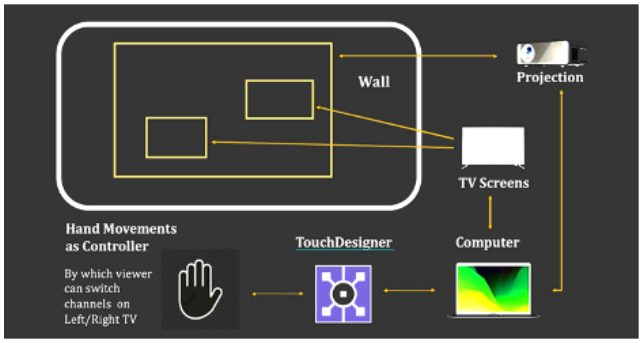

Figure 6. System Set-up Diagram

Figure 7. Audience Interaction at the Exhibition

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