

Hydrogen Wishes

Winslow Burleson, Paul Nemirovsky, Dan Overholt
MIT Media Lab

Abstract

Hydrogen Wishes, presented at MIT's Center for Advanced Visual Studies, explores the themes of wishes and peace. It dramatizes the intimacy and power of transforming one's breath and vocalized wishes into a floating sphere, a bubble charged with hydrogen. The floating bubble represents transitory anticipation as a wish is sent on its trajectory toward fulfillment. Light, heat sensors, microphones, projected imagery, hydrogen and ordinary soap bubbles come together in this exploration of human aspiration. As in our lives, many wishes escape, but many others are catalyzed by the heat of the candle and become ethereal. The fulfilled wishes then become living artifacts within projected photographs of Earth cities as seen from outer space.

1 Introduction

Fire and breath have been important media elements of the contemporary arts (e.g. Burning Man [1]). The Italian conceptual artist Piero Manzoni produced a series entitled "The Breath of the Artist" [2]. In Hydrogen Wishes we capture the breath of the visitor and use the serenity of candle flame as an activating agent. Referencing the engaging process of making a wish, we allude to the power of dreams, the mystique of a fire breathing dragon as a granter of wishes. The wishes "granted" are kept and contextualized, both visually and acoustically and presented to subsequent viewers.



Fig. 1. The installation: candles, tube, and the projected city.

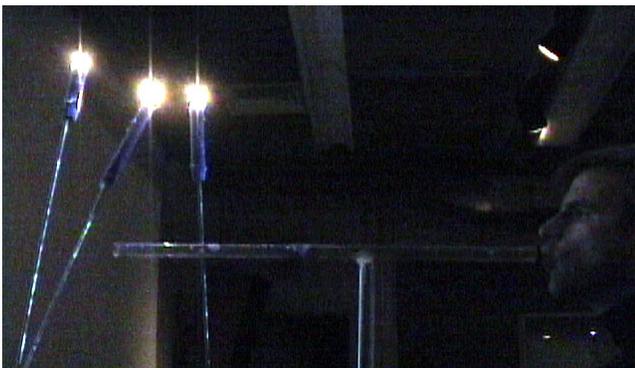


Fig. 2. A visitor whispering into the message tube

2 Experience

Upon entering the installation space the viewer sees a projected satellite photograph of a city landscape, a wreath of candles through which the image is projected, and a tube. The visitor is invited to make a wish by whispering it into the tube [Fig 2]. As

the wish is recorded, a bevy of soap bubbles emerge from the far end of the tube and float up to the candles. Along their way they cast translucent circular shadows upon the city, augmented by ongoing transformations of the projected image. Some of the bubbles continue past the candles, but others are energized by the candles and explode in a small burst [Fig 3 & 4]. Coinciding with the burst, the recorded wishes are played back for the visitor, accompanied by music and transformed imagery of the city. The new wish becomes a part of a colony of wishes visually presented as small flickering points wandering around the projected city landscapes. The overall expressive experience is that of celebration.

3 System

The hardware consists of a tube into which audience members whisper their wishes. The tube is supported by a pedestal containing a computer and a small tank of hydrogen gas with a solenoid regulator. A sensor composed of a thermistor and a microphone within the tube measures the presence of a visitor's breath and triggers the creation of a hydrogen soap bubble. The bubbles rise rapidly from the far end of the tube to the candle wreath. As the bubbles reach the candles, some of them burst. These bubbles release a puff of flame and a soft but energetic sound. A phototransistor, supported by the candle wreath, detects the light produced by the exploding bubble. The computer responds by creating a digital version of the bubble within the image of the city. These digital bubbles traverse the landscape of the available cities; their messages are heard in conjunction with the release of new wishes. In summary, the computer takes on the tasks of noting when the user makes a wish; recording the wish; creating hydrogen bubbles; generating image transformations, sensing when bubbles explode; and juxtaposing the new wishes with the previously recorded wishes within the context of the continuously changing projected cityscapes.

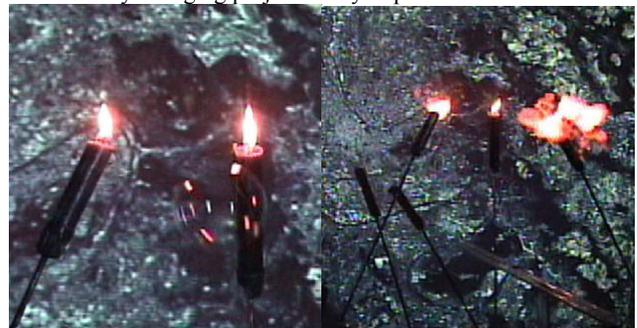


Fig. 3 & 4. Bubble floating up and bursting.

References

1. <http://www.burningman.com/>
2. Manzoni, Piero; 1959-1961; the breath of the artist, http://www.artinvest2000.com/manzoni_english.htm