Fountains of Data: Evocation Zones

MARILÈNE OLIVER, University of Alberta
SCOTT SMALLWOOD, University of Alberta

1. PROGRAM NOTES

Fountains of Data: Evocation Zones is a virtual reality (VR) artwork that explores the evolving landscape of healing in the digital age. The work was originally inspired by ancient Celtic healing fountains in the Brittany region of France. Many of the fountains, which date as far back as 5000 BC were, and still are believed to be places of healing, often of very specific ailments, and were part of a larger culture of water as a healing agent [1,2,3]. For NIME 2025, we present three VR scenes which each focus on a different fountain. For example, the first is *Fontaine de la Vierge* in Bulat-Plestivien, where mothers would come to drink and pray for an abundance of milk and good health for their children. Fontaine de la Vierge is a deeply sunken fountain, and to access its healing waters, you have to go down 12 steps, each of which is about 40 cm high. The fountain is enclosed by deep granite stone walls that create a powerful reverberating space for the sounds of trickling water, birdsong, church bells, footsteps and in this age, airplanes.

In each fountain scene, the visitor initially encounters a field of particles derived from the ancient Celtic Ogham alphabet that forms into point cloud scan of each fountain structure in an empty black space. As the visitor explores the area, moving arms in swim-like strokes causes interaction with the soundscape, including the addition of water sounds, and eventually leading to the particles resolving into a more realistic conception of the space, via LiDAR scans, 360-degree video, and ambisonic field recording from the actual site of each fountain. A layer of voices reading contemporary Reddit conversations about the healing properties of each fountain are whispered in the corners where visitors may once have huddled, juxtaposing ancient spaces for healing and solace with those virtual spaces in the digital age. A video sphere captured from the actual pool of healing water acts as a portal to the next healing fountain. Other sounds and surprises await as the visitor is encouraged to explore the virtual space.

Fig. 1. La Fontaine Malo.

2. PROJECT DESCRIPTION

The project is a virtual reality (VR) scene created in Unity, with Resonance Audio for 3D audio implementation, and the ChucK synthesis language for real-time synthesis manipulation. It is targeted for a standard XR headset, in this case the Meta Quest 3. The project brings the visitor into an abstracted version of the Fontaine de la Vierge, and two other fountain environments, but only after coaxing the player to "swim" with their arms, evoking/invoking an eventual water soundscape into being, and eventually the visual manifestation of the fountain environment. Sounds and music are derived from field recordings of the site, and include the sounds from inside the healing fountain, recordings of nearby church bells, local birds, and water from inside the fountain via a hydrophone. Visitor arm movements create changes in the soundscape, which include a gradual evolution and unfolding, as well as more localized, gestural sounds in time with arm movements. Ultimately, the visitor is encouraged to explore the space sonically and visually, evoking the eventual emergence of the fountain/bath environment.

3. PERFORMANCE NOTES

The piece will be set up in a quiet room with a Meta Quest 3 headset and dual controllers, connected to a PC laptop. The player is encouraged to explore the space using standard VR movement control, which will be explained with a tutorial sheet onsite.

ACKNOWLEDGMENTS

REFERENCES

[1]   Auray, Christophe. 2021. *Les eaux miraculeuses et guérisseuses de Bretagne*. Editions Ouest France.

[2]   Le Deunff, Roger. 1996. *Chemin des Fontaines Bretonnes*. Editions Dancau.

[3]   Rio, Bertrand and Albert Poulain. 2008. *Fontaines de Bretagne*. Coop Breizh.