D5.5 3D Sonic Narratives

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EXECUTIVE SUMMARY

This deliverable describes the various soundscapes that were created to showcase the capabilities of PlugSonic Soundscape and the Pluggy social platform. At the time of delivery 4 different exhibitions have been created. Work is ongoing; however, the four published soundscapes are:

- Open-Air Water Power Museum, Dimitsana
- Life in the Dark, Natural History Museum
- Albert Memorial Soundscape
- Other Worlds

They can be found at the following addresses:

Open-Air Water Power Museum, Dimitsana
https://beta.pluggy.eu/exhibitions/plugin/5ca1e3cbf0adadd7c66b31e8/5d25baee34b84b650875f410

Life in the Dark, Natural History Museum
https://beta.pluggy.eu/exhibitions/plugin/5ca1e3cbf0adadd7c66b31e8/5d396d0734b84b650875fbbf

Albert Memorial Soundscape
https://beta.pluggy.eu/exhibitions/plugin/5ca1e3cbf0adadd7c66b31e8/5d27159c34b84b650875f538

Other Worlds
https://beta.pluggy.eu/exhibitions/plugin/5ca1e3cbf0adadd7c66b31e8/5d160e609a19c52cb4dab520

1   Introduction

D5.5 – 3D Sonic Narratives is a public deliverable of type DEM. This document is its accompanying report and in the next paragraphs we describe the soundscapes that have been created to showcase the PlugSonic Soundscape apps which are a part of the PlugSonic suite. The app is integrated into the PLUGGY social platform and is a part of the platform's curatorial tool. It was developed to facilitate spatialization of audio content to create virtual exhibitions, enhance on-line and/or on-site visits to museums, monuments, archaeological sites and share tangible and intangible cultural heritage.

Soundscape Create is available only as a web application and it is used to curate and test the 3D audio narratives and soundscapes. Soundscape Create allows the saving of exhibitions and its publishing in PLUGGY for everyone to enjoy it using the Soundscape Experience apps.

Four soundscapes have been created to showcase the Soundscape tools. They include: an exhibition of an open-air water museum in Greece; an audio guided tour of the Albert Memorial in Hyde Park; a soundscape to accompany the Life in the Dark exhibition in the Natural History Museum; and, finally, Other Worlds, an audio experience exhibition to represent the advancements made through cultures working together for a common goal.

2   Open Air Water Power Museum, Dimitsana

A virtual soundscape of the mechanisms and the surrounding environment of the Open-Air Water Power Museum of Piraeus Bank Group's Cultural Foundation in Dimitsana. The Open-Air Water Power Museum, in Dimitsana (Peloponnese), highlights the importance of water-power in traditional society. Focusing on the main pre-industrial techniques that take advantage of water to produce a variety of goods, it links them to the history and daily life of the local society over the ages.
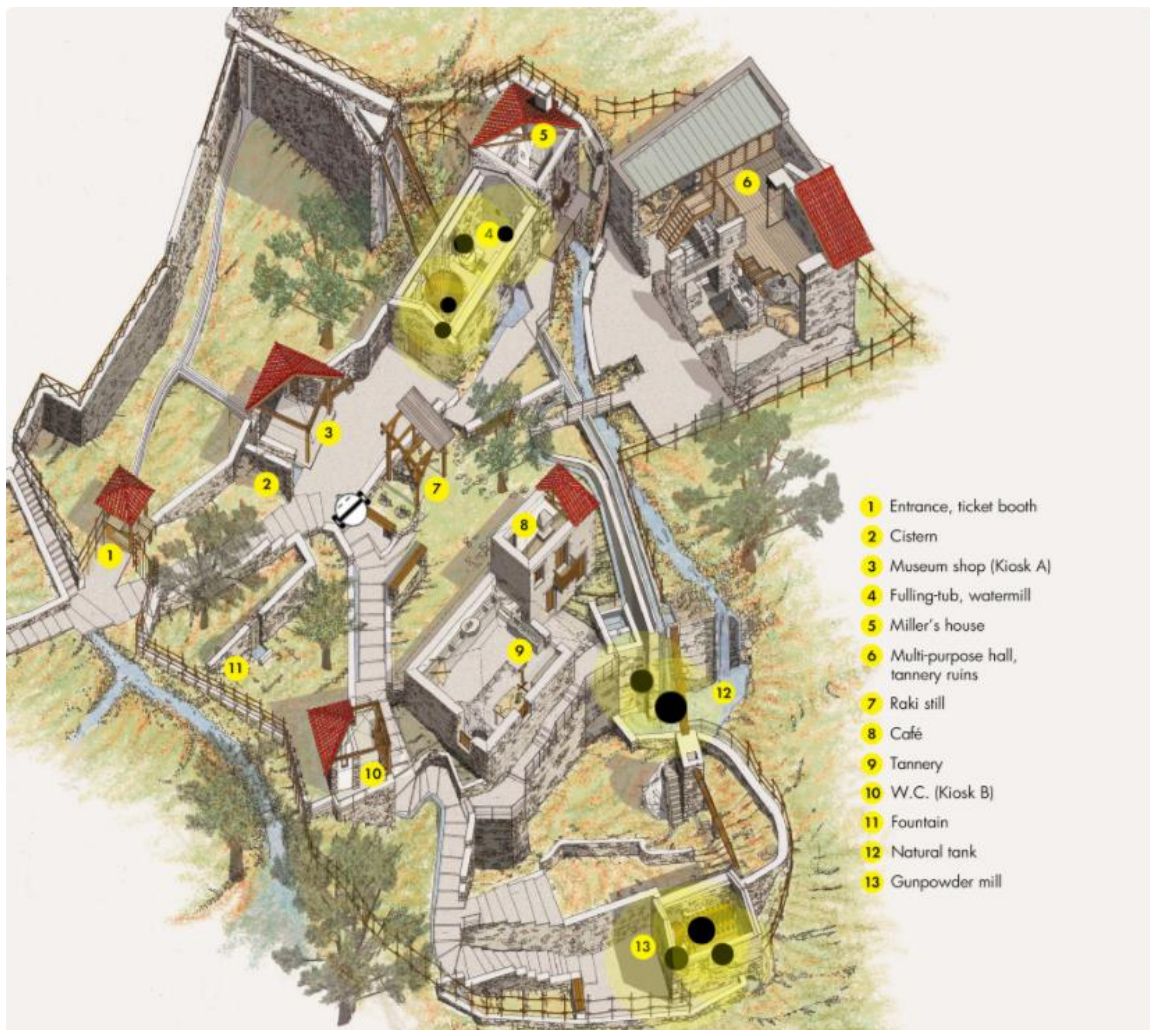

1	Entrance, ticket booth
2	Cistern
3	Museum shop (Kiosk A)
4	Fulling-tub, watermill
5	Miller's house
6	Multi-purpose hall, tannery ruins
7	Raki still
8	Café
9	Tannery
10	W.C. (Kiosk B)
11	Fountain
12	Natural tank
13	Gunpowder mill

Figure 1: A Screenshot of the exhibition map with source positions

3   Life in the Dark, Natural History Museum

This exhibition took place in the Natural History Museum (South Kensington, London) and introduces the visitor to nocturnal animals and their environments (e.g. forests at night, caves, deep oceans). The visitor moves around several rooms which describe the life in each of these environments through the use of sound and light animations inserted in custom designed scenography. Specimens of the animals from the museum's collection were exhibited.
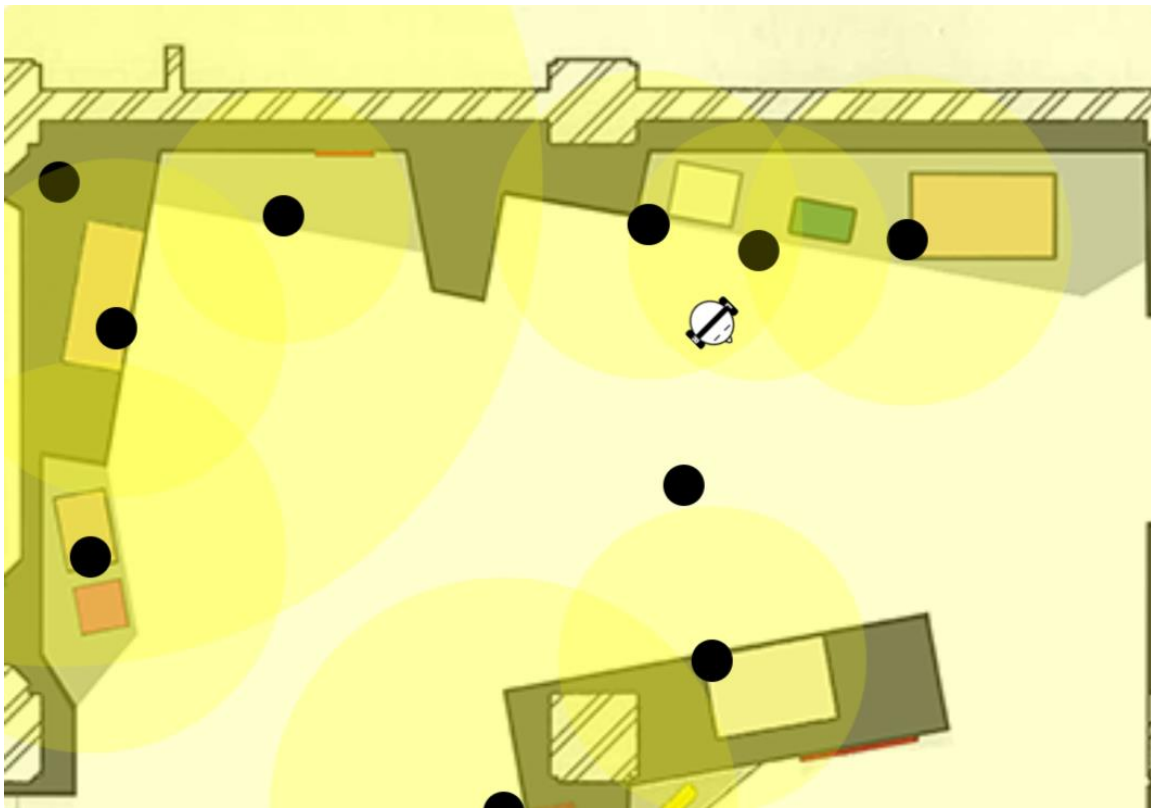

Figure 2: Screenshot of the Life in the Dark Exhibition floorplan with sound sources

4   Albert Memorial Soundscape

The Albert Memorial is situated in Kensington Gardens, London, directly to the north of the Royal Albert Hall. It was commissioned by Queen Victoria in memory of her beloved husband Prince Albert, who died in 1861. Opened in July 1872 by Queen Victoria, with the statue of Albert ceremonially "seated" in 1876, the memorial consists of an ornate canopy or pavilion, in the style of a Gothic ciborium over the high altar of a church, containing a statue of the prince facing south. The listener starts the exploration from south edge listening to a general description of the monument with background music from the Royal Albert Hall.
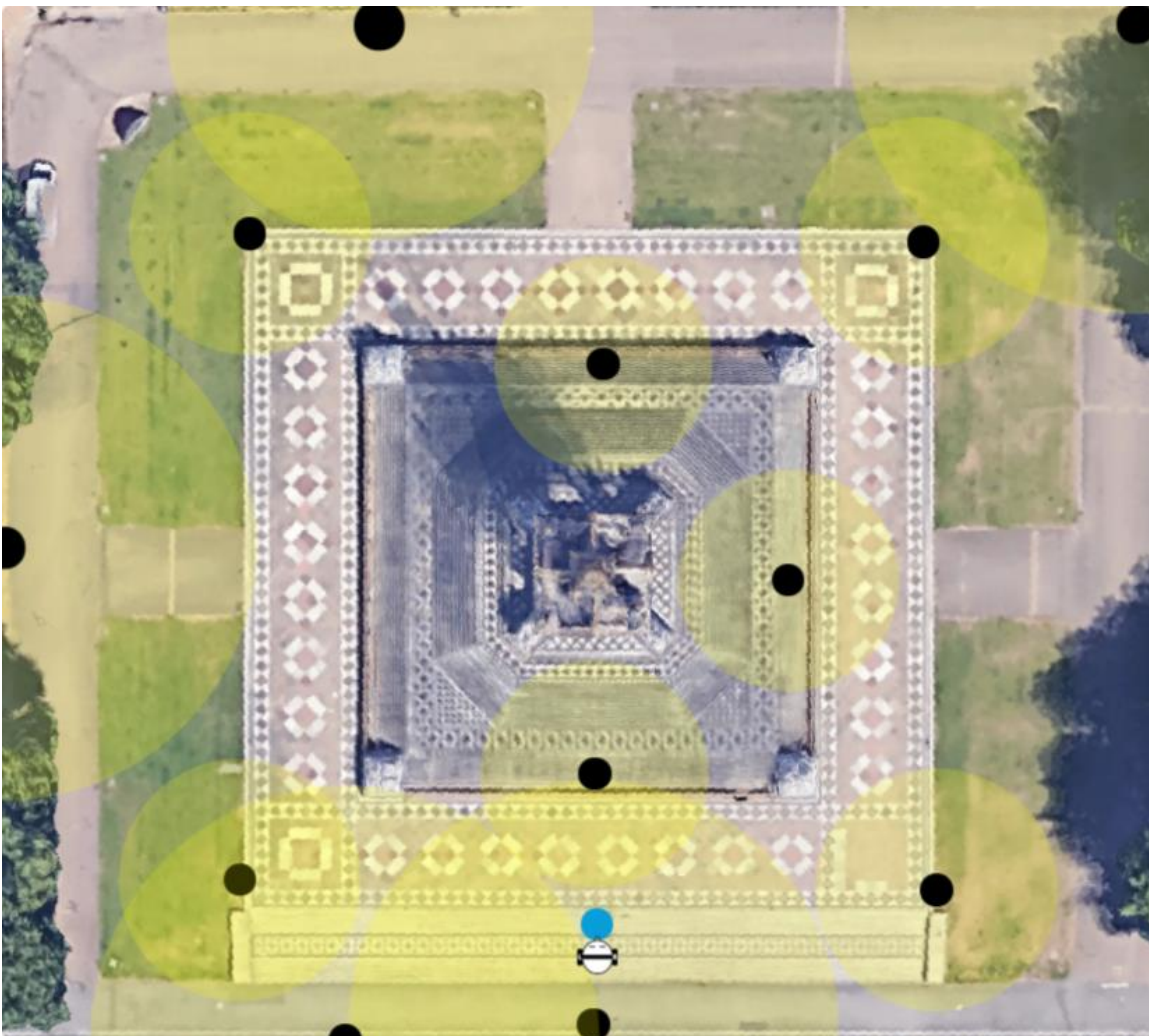

Figure 3: A Screenshot of a satellite view map of the Albert Memorial with sound source positions

5 Other Worlds

Other Worlds is an app with a musical soundscape representing the advancements made through cultures working together for a common goal, created by Artist, Mike Ladouceur. His intention was to allow the users a chance to explore and face other cultures themselves, challenging their own ideas about foreign cultures and creating a stronger sense to preserve and share their own culture.

Part of the audio used to create the soundscape is from the "Golden Record" which was created for the two Voyager spacecraft. The purpose of these two missions is much like that of PLUGGY, to preserve and share our cultural heritage. Rather than sending a probe around another planet collecting data or a module to land on another space object relaying images home, the Voyager missions are never meant to return to earth. The spacecraft were sent out beyond our solar system to be discovered by alien life. Inscribed on this record is our position in the solar system, a representation of a man and woman, and sounds of earth including greetings in many languages, natural sounds of landscapes across the planet and music ranging from Bach to Chuck Berry. These missions are a cosmic "message in a bottle" and whether they are ever discovered by any other life forms or not, the purpose driving the missions brought many different people together for cultural preservation.

The artist decided to primarily use the greetings in different languages from the record to represent different cultures directly. There are 10 points within the environment which act as sound sources. The various greetings will come from these different points separate from each other. The 10 different sound sources will also contain a piece of music. Each audio stem containing both music and greetings will only be a small part of the overall soundscape. When the user begins their experience, these different greetings and sounds will be distant, forcing the user to move towards a particular sound source in order to experience that particular culture; the different cultural greetings. Over time the range of these sound sources will expand and the different pieces present at each sound source will start to mingle and bleed into each other creating one overall unified soundscape. This will allow the user to experience the benefit of preserving and sharing cultural heritage by hearing all of the individual parts combined into one full piece of music. Because the experience is driven by the user, it will be different every time. As the user explores the environment in a different way, they can approach the various individual sound sources before they develop into one.

The theme of science and space exploration is important to this project because it represents a common goal and language that all humans can work together towards, no matter their cultural origins. It is a theme that shows the benefit of uniting people from different cultures because they bring their unique perspectives and curiosities which have yielded some of the greatest benefits of mankind. My hope is that through this experience, the user will feel both more connected to their individual culture with a stronger need to preserve what is unique about it, as well as a sense of unity and curiosity about other cultures they do not know.

6 Conclusions

This deliverable presented the four different soundscapes created using the PlugSonic Soundscape applications. The PlugSonic suite was intended to give institutions and citizens, an immediate and easy way to curate and enjoy cultural heritage content in different ways and formats, without the need for specific knowledge or understanding of the underlying technologies.

These soundscapes showcase exhibitions with a breadth of content and style, all of which were facilitated by the PlugSonic Soundscape apps and were created with no requirement of expertise in spatial audio. They are now published on the social media platform, ready to be consumed and enjoyed by those wishing to engage with cultural heritage.