

Orçamento Participativo Portugal 2018 na área de ciência e tecnologia que reúne as artes e as ciências apresentação da proposta do artista intitulada canopy da floresta por artista Lucia Ravens

Representação de artistas: A Fundação de Serralves, Villa e Parque de Jardim no Porto

Design Finalist OPP Portugal 2018 in the area of science and technology that brings together the arts and sciences Presentation of the Artist's Design Proposal: working title 'Forest Canopy' for Artist Lucia Ravens

### THE ABSTRACT

Nature can be regarded as the world's most powerful and influential artist.

The modern concept of public art in public parks is intended to foster friendship and understanding between communities and encourage art culture appreciation.

This canopy art installation project is positioned at the junction of art, science and nature to redefine our relationship with our sublime environment via visual articulation and evocation.

The ultimate goal is to illuminate the importance of how essential it is to maintain, preserve and build upon our public art appreciation in our city parks. This public art installation proposal initiative is two fold; to shed light on the significance of bringing together communities, through the enjoyment of public art in parks and to raise awareness of the importance of how art and beauty can create healthy park environments and thriving community relations. Through dynamic interconnectivity with the local community and beyond, this public art project will enhance the alliance between art, culture and a healthy urban environment in Porto.

## THE CONCEPT

One of the most valuable and important habitats on Earth: **global forest canopies**.

Fusion of remotely sensed multi-spectral imagery and LiDar photography forestal color analysis of tree species and foliage will be interpreted into visual narratives for expansive abstract color-field installations. This projection of light communicates an array of forest data creating an archive of forestal inventory. This captured light transforms forestal tracks into glorious color-fields to enhance public space and cast light upon the effects of climate change and the important role our global forests play in our ecological future.

research note: presently in discussions with an advisor/scientist Dr. Krista Teixeira Director of the Forestal Global Data Lab at Smithsonian Conservation Biology Institute.

page 2 photo right: LiDar photography of global forest canopies interpreted as a three-panel color field narrative

'Forest Canopy' design Lucia Ravens © 2019



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#### THE THEME

Visualizing Data. The message is in the medium. The light, design and data are working together in this concept to explore design thinking and the tools required to meet social, economic and climate change challenges. Highlighting LiDar photography light in this concept showcases the powerful influence of this new media to inform our culture. The color-fields of light in this work are saturated with forest ecological detail. Every color represents a fascinating, lifegiving and life preserving quality of the tree, giving voice to the impact of climate change on our global forests. The light in this concept leads to better understanding change and allows for the archiving of our global forestal data which is critical to forest conservation and climate protection efforts.

page 3 photo right: credit, http://quantitativeecology.org/wp-content/uploads/2013/09/ LiDARPlotView.gif

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## THE VISITOR EXPERIENCE

A walk under the canopies will reveal to the senses a moving color field. Colors of fuchsia, red, yellow, magenta, aqua, blue, purple and green will embellish the canopy's surface creating a mystifying expansive abstract color field painting. The colors will change in real time creating a sense of movement and awe inspiring moments. The light reflections of the work will enhance the visitors experience.

## THE TECHNICAL PRINCIPLE

LiDar is a surveying method that measures distance to a target by illuminating that target with a pulsed laser light and measuring the reflected pulses with a sensor. Differences in laser return times and wavelengths can then be used to make digital 3D representations of the target (trees). Through LiDar photo sensing these 3D representations of select forestal tracks (in regional Porto Portugal ) will be projected onto the semi-transparent canopies to reveal the resplendent visual narratives. The mosaic light plays a key role in the essence of the expansive color fields, as each color represents an element of the tree thus emphasizing the importance of our global forestal tracks. The National Parks, Reserves and protected forests of Northern Portugal known for their brilliance will be considered for the LiDar photography capture and creative visual interpretation for this project. The canopies of color fields will be an expansive array of vitality and luminosity

page 4 photo right: indoor atrium hall rendering: Conceptual Canopies Real Time LiDar remote sensing. Projected abstract color fields of forestal imagery

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