URBAN OASIS

NEUROAESTHETIC STUDY OF THE FOREST

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BIOPHILIA, NEUROAESTHETICS, DESIGN FOR WELL-BEING

IT:U x **Ars Electronica** FOUNDING LAB

PERSONAL WEBSITE
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Figure 1. High complexity representation of the forest. image credit Sonia Litwin

LOOKING FOR THE 'ESSENCE' OF THE FOREST

Project utilizes data and image processing techniques, employing Python for feature extraction that reflects the human visual system. This technical approach is complemented by architectural insights into the impact of natural shapes, supported by neuroaesthetic principles and EEG studies.

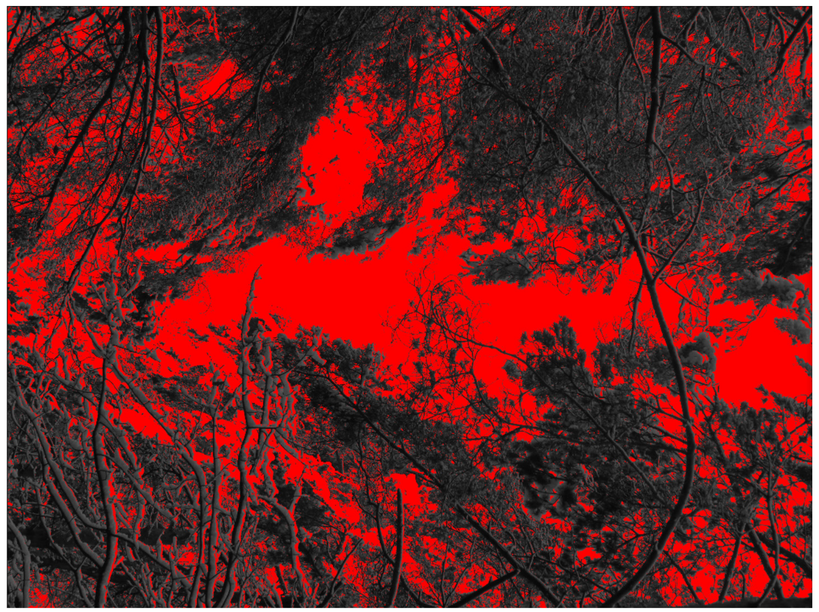

Figure 2. Feature extraction from the forest imagesresulting in a dataset poised for future neuroaesthetic exploration. This dataset categorizes forest imagery on a neuromorphic complexity scale, offering insights into the fundamental elements of biophilia and the psychological impact of natural environments.

When you walk through the city how do you feel? Are you connected to yourself? Or distracted, scattered, in a rush? Are you in control, or is the environment that controls you?

Urban Oasis lies at the intersection of environmental psychology, neuroaesthetics, and bio-inspired design. Grounded in the principles of architecture, neuroscience, and biophilia, it aims to create an artificial representation of nature that can be applied to urban design of the future spaces.

By measuring the brain response to forest images of different complexity I aim to identify the most simplified 'version of the forest' that can be further used to create the language of artificial nature.

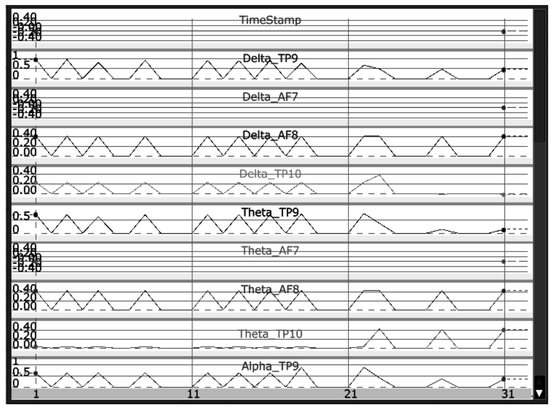

Figure 3. Processed recording of the EEG data. image credit Sonia Litwin

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