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PRESENTER ABSTRACTS
ACADEMY OF NEUROSCIENCE FOR ARCHITECTURE

Allotopes: Place, Moment & Thought (Explorations in Neuro-Architectures)

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Allotopes is a series of 6 black and white drawings with an accompanied sound piece listened through a pair of headphones. The work is generated as a specific frozen moment chosen from a dynamical system by six friends (three women and three men). One at a time each person was asked to wear a wireless EEG headset, which samples the electrical action potential of his or her brain waves. Their mental modulations are analyzed using real time DSP and turned into a real-time visual geometrical landscape and soundscape that they become immersed in. During the continuously transforming experience, the user is asked to select a moment, in which they feel particularly compelled by; something, which they personally resonate with and are invited to freeze that moment. Data, image, signal and geometry of the chosen moment are then saved and through a series of processes used to produce a drawing, which is unique and specific to those person's mental proportions. Lastly, a soundscape is composed using this mental moment data, focusing on translating the aural proportions into temporal and harmonic cues. The two are meant to experience together, hearing the drawing and seeing the sound, one special moment, within a world, within each one of us.

1. ALLOTOPES

1.1. INTRODUCTION

How might one diagram the patterns found in a stream of collected data related to a certain experience? How would these patterns compare to the experience itself? Might they help us understand how we feel, what our favorite color is, or the things that we don't prefer despite how we may be convinced otherwise? How might these developments affect current fields of praxis and theory? Might new fields merge or ideas that were once prevalent become relevant once again? How might these concepts materialize, generalize and perhaps most importantly, specialize? These are not new ideas, rather they are ideas that beg to be continually imagined, reconstituted and reconfigured. Allotopes and the ideas that led to its realization have their roots in these questions and point towards a relationship with architecture and spatial thinking. These drawings do not follow a scientific systematic process, though they are produced by a methodical approach. They do not objectively define an emotion or feeling, though there may be a particular understanding to which the drawings allude. Technical processes are utilized without alienating our sensibility; the rule based system subject to the rational nature of the intuitive, neither enslaved by the other. Sequences and structures grow from the micro to the macro, determining a compositional arrangement, a notational drawing, scoring one specific moment within a world, within each one of us, celebrating the local universal.

1.2. OTHER-PLACES

Allotopes are a series of six black and white drawings with an accompanying soundscape. The intention is to experience these two modalities together, hearing the drawings and seeing the sounds; the music of the mind. A "Tope" is a place, a specific and spatial moment chosen from a dynamical system unique to one person while connecting to the others, the "Allo". Each drawing is unique and specific to each person and their experience. The work experimented with the selection of a moment from a continually evolving dynamic system. A frozen moment by using a balance between ones conscious taste, proportions of bio-data and the patterns found throughout the other's chosen moments. Sensibility — Specificity (Sense - Sample - Select - Scan - Synthesize)

1. The visual and aural translation of bio-data
2. Interacting with a self-generating system
3. Selecting a frozen moment from a dynamic system
4. Personal spatial preferences and proportions
5. Scanning for preferential patterns
6. Specification through the particular

1.3. PROCESS

One at a time, six friends (three men and three women) were asked to sit in front of a large screen and a pair

of speakers while wearing a wireless EEG headset that samples the electrical activity occurring in the brain. The content presented was a visual and aural composition that used the raw data from the EEG and translated through variable spatial parameters, and into a virtual scene of geometries, colors, textures, pitches and intensities. This provided a window into a world where one was witnessing their personal data as it was occurring. Immersed in their own continuously transforming experience, each friend was asked to select, freeze, and save a moment they found particularly compelling a moment in the visual and aural space that they personally resonated with. Emphasis was placed on the decision by allowing the dynamic system to be frozen at any time giving the freedom to inspect and analyze the process, yet limiting the final selection to only one moment. The data associated with this moment was collected, saved, filtered and scanned, noting the proportions and patterns. The results were compared across all sets and a group-set was produced that fed-back into the translation process, tuning each set to the common bond and celebrating the differential unity. This process finalized with the patterns and proportions translated to geometry, and the final drawings emerged. Lastly, a soundscape was composed using the resolved data, focused on translating the proportions into temporal and harmonic cues. As each drawing exists in space, its corresponding sound is scored through time. One after another, each person's selection flows in and out as the group-set grounds the piece with its modulating flow and rhythm. (Listen at: soundcloud.com/socinematic/allotopes-blindspot)

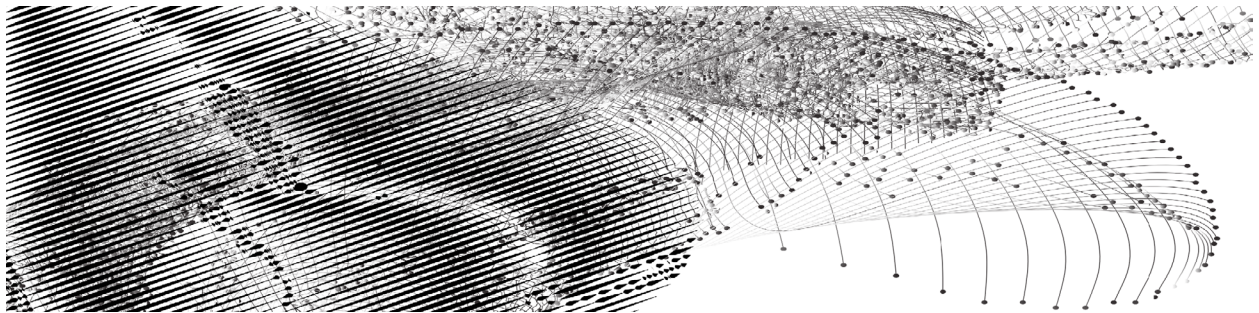


Figure 1. Allotopes Composition Study

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2. REFERENCES

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Allotopes Website: www.alternity.info/works/allotopes/

3. AUTHOR BIO

F. Myles Sciotto is an architect interested in the dynamics between architecture, sound, sense, sensibility and the dialogue between architecture and the body. He received his Masters of Architecture from SCI-Arc where he received the Best Thesis Honor studying with Jean-Michel Crettaz, Michael Rotondi and Benjamin Bratton. He is currently a PhD student at UCSB studying with Marcos Novak and holds a Lecturer position at USC School of Architecture teaching studios that focus on the role of interactive systems and sound within Architecture. As a teacher and a maker, his work encourages the development of behavior and feedback within the composition of spatial environments and reactive mechanisms between the body, sound and space. He has taught and critiqued at SCI-Arc, USC, Columbia, Art Institute and Art Center and lives in downtown Los Angeles.