

# SoundScapes: Environment Generation Through Voice, Ambient Noise, and Alternative Perceptions of Reality

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## Abstract

The design education experienced by this project's authors is one of staunch obedience to only the most tame and reliable definitions of design, media, reality, and perception. What heretofore undiscovered experiences could be developed when new media is seen through the lens of radical new ideas such as biocentrism and human-centered experiential design? By joining augmented reality devices, audio visualization, and generative art with these new concepts in mind, we are developing an experience that will introduce users to new ways of experiencing and thinking about reality.

## New Understandings

SoundScapes explores the intersections of new media with new understandings of reality and noise. Though the authors do not necessarily subscribe to each of these precepts, we are exploring how they can shape a new media project and help us discover new ways of interpreting signals from the elusive objective reality.

## Reality

Phil Elverum once sang "As long as I am drawing breath, the world still exists / But when I die, everything will vanish ... With my eye, every shape created". [1] Elverum admits to employing "references to classic zen poetic tricks" [2] in his only biographical essay, and these enigmatic lines are one such trick. It seems that Elverum was trying to bring an ancient Buddhist understanding of reality into the context of contemporary indie rock. In a talk reproduced in "The Mindfulness Bell" #52, Thich Nhat Hanh references the same concept more directly:

"The world outside is our consciousness, is us. It is not something separate and distinct. The object and the subject of perception inter-are. Without subject, there is no object; without object, there is no subject. They manifest at the same time. To see means to see something. The seer does not exist separately from the seen; they manifest at the same time. If you imagine that the seer is independent and goes out in order to see the seen, that is a mistaken perception." [3]

The idea that the perceiver and the perception are one and the same is very old in Buddhist tradition, but

it has only begun to reach mainstream Western audiences through work such as Robert Lanza's radical theory of biocentrism. Lanza presents this theory of the entwined perceiver/perception through a scientific lens:

"The behaviour of subatomic particles – indeed all particles and objects-are inextricably linked to the presence of a conscious observer, they at best exist in an undetermined state of probability waves ... Without consciousness, "matter" dwells in an undetermined state of probability. Any universe that could have preceded consciousness only existed in a probability state" [4]

## Noise

How do these unconventional ways of thinking about reality relate to our topic of "Noise Contra Signal"? With this concept of reality in mind, we choose to challenge the theme's precept that the noise and the signal are not one and the same. To reference another "zen trick": if all one could perceive was the reflection in a mirror - that is to say that the reflection was one's reality - wouldn't the dust on the mirror be just as real as the reflection itself? Where is the divide between noise and signal when a bat sees the world through sound via echolocation? For many humans, attempting to see so accurately through sound would simply result in noise - that is, signals we are not fit or trained to perceive. If we think of noise and signal as one and the same, (or, as Phil Elverum would put it, "separate layers of one big misunderstanding"[1]) we open ourselves to new ways of finding inspiration in the development of new media.

## The Artifact

Through graphic and interactive explorations, comparative analysis, and user need-finding, we are exploring opportunities for new media experiences. Currently, we are developing an app for Google Cardboard that uses audio to generate new environments. The experience is a feedback loop of echolocation and inverted echolocation.

The resulting landscape will be simultaneously

generated and revealed by the user's input. In this system, there is no boundary between the noise and the signal: both are equal parts of the experience.

### References

1. Mount Eerie. *Planets*. 2015, CD.
2. Elverum, Phil. "Biography of Phil Elverum/Mount Eerie." Biography of Phil Elverum/Mount Eerie. Accessed February 16, 2016. <http://www.pwilverumandsun.com/pwilverum>.
3. Hanh, Thich Nhat. "The Mindfulness Bell." The Mindfulness Bell. Accessed February 16, 2016. <http://www.mindfulnessbell.org/wp/category/52-autumn-2009/>.
4. Williams, Gareth. "Biocentrism and Buddhist Teaching on Reality and Consciousness." The White Clouds Sangha. Accessed February 16, 2016. <http://www.whiteclouds.info/biocentrism-and-buddhist-teaching-on-reality-and-consciousness/>.

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