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## **Sleep Frequency**

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Prepared? Sleep Frequency

Senior Project Submitted to The Division of The Arts of Bard College

by Rebecca Marlena Wagner

Annandale-on-Hudson, New York Dec 2013 I have three main interests as a sound artist. They are 1) field recordings 2) the physics of a sound wave and 3) how sound resonates within, around, by, and through us. My library of sounds is comprised entirely on my own field recordings, collected since I was 13 from several countries. Although my first recordings were captured long before I had ever heard the term *musique concrete*, I consider myself a contemporary musique concrete artist, making electronic music composed of natural sounds, altered, edited, or distorted, then translated to the ears through creative means.

In my moderation show last fall, 'Treespeak', I displayed 6 wireless waterproof speakers in trees, and ran a half hour composition on repeat for an 8 day installation. The composition was made of recordings from my backpacking trip to Southeast Asia last summer; samples ranged from monks chanting, to birds chirping in the monastery, to radios playing on the streets of Bangkok, to trains and planes. Music and sounds have a very powerful association with memory and my work is intended to give people new understanding of and relationship to their space through hearing.

My first senior show, 'Prepared?' featured a MIDI piano, a prepared piano in the style of John Cage, and a live DJ mix to 6 speaker surround sound. The MIDI piano played a ghostly cycle of chords and arpeggios as I followed the same matrix-designed score on Bass Clarinet and Clarinet. The score is my take on Serialism, allowing the performer choice to go through a series of chords in any direction following the matrix. The result is at times cacophonous when minor chords strike against each other, until moments of harmony ring between the piano and clarinet for many phrases. The second piece showcased samples of piano work by Cage and Conlon Noncarrow, field recordings of FM radio, analog synthesizers, and a metal detector. Beside an upright piano prepared with nails, screws, plastic clothespins, and rubber pieces, these samples provided the audience with an interesting experience as the sounds zoomed and darted around the speakers circling the audience. Listeners could follow certain sounds and identify prepared notes as either coming from the piano or the samples.

My second show, 'Sleep Frequency' explores the translation of waves into data and how sound waves resonate within the body and universe. Recordings of space inspired me; radio waves emitted by the sun, Jupiter, clusters of energy converted into audible sound waves, letting us hear echoes of cosmic events light years away. I was also inspired by psychologists' research on the brain waves emitted during deep restorative sleep- delta waves below 3 Hz. When we sleep and our brains are resonating at this very low frequency, our DNA restores, our cells regenerate, and our brain processes and consolidates memories. The importance of listening is made so great when we consider how much of the world we learn about through hearing. My work is intended to elevate the concentration of listening to an intimate discourse with the universe. Waves are constant and resonant in everything, moving forward and pushing energy around our ears that we may perceive as sound.