Meditative Autoscopy

In yoga, the meditative observation of one's breath to experience the flow of prana or life energy is called pranayama. For different levels of thought and emotion that you go through, your breath takes on different types of patterns (Sadguru, 2014). There are many different ways to meditate, but almost all involve consciously focusing on the breath or the heartbeat, the two vital signs of life and health.

Concept

Transhumanism to me parallels the spiritual evolution that call for transcending limitations of the body and mind and evolving into a higher being capable of functioning in ways that the current physical and mental states deem impossible. To explore this synergy, I'm focusing on the meditative process that is considered, both spiritually and scientifically, as a powerful process that influences cognitive performance and general wellbeing (Tomasino & Fabbro, 2015). The meditative piece harnesses the observers' breathing to infuse movement in the pattern of breath, and thus life, into an otherwise impassive sculpture.

I also intend to explore the areas of autoscopy and bring in the element of out-of-body experience into this piece, since the observer will literally be looking at a translation of their own body in the artwork. This, however, will probably be highly speculative and theoretical, and I need to do further research in how it could work.

Idea

With this project, I intend to create a physical installation that reacts and moves rhythmically to breath, so the observer experiences the process visually and aurally.

I have created a wearable breath sensor that relates the observer's state of being to the installation. I'm hoping to capture and physically portray the experience of meditating as a process akin to observing or interacting with art.

Materials Dimensions Budget

For the art installation, I have used an origami moving object that relates the movement of breathing. The idea is to capture any subtle variations and amplify them through these movements.

For this project, the list of materials I plan to use are:

- Breath sensor using knitted conductive yarn
- Card paper to create opening and closing origami structures
- Arduino
- A pulley system laser cut from wood
- Servo motors to connect with the pulley system that open and close the origami structures

This art piece spanned two walls. The movement, placement, and experience was enhanced by stripes that I painted on the wall and around the structure.

The budget for this project was at \$120.

My inspiration comes from my experience with spiritual processes, scientific neuroscience experiments, countless tries at meditating without distractions, and the idea of having an engaging interactive piece that physically relays my state. Artists, scientists, and philosophers who inspire me are:

Inspiration

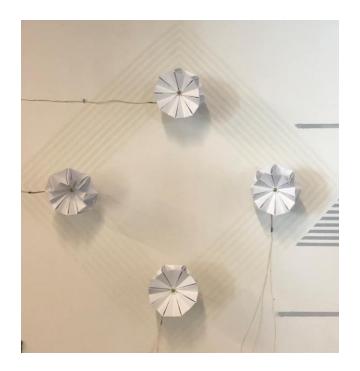
- John Cage (Composer, experiential abstraction)
- Yayoi Kusama (Artist, immersive experiences)
- Steven Pinker (Cognitive psychologist, The stuff of thoughts, How the mind works)
- Jack Kerouac (Writer, all writings, general philosophy, and experiential descriptions)
- Oliver Sacks (Neuropsychologist Awakenings, The man who mistook his wife for a hat)
- James Turrell (Artist, Bindu Shards)
- Sadguru (Yogi, yogic explanations for mind and body)
- Rajneesh (Osho, wellbeing and experience)
- Pico lyer (Travel experiences and state of being)
- Jeong Kwan (Buddhist monk and chef, aesthetic and transformational experiences through well being and Buddhist philosophy)
- Max More (Philosopher, Transhumanism)
- Frank Herbert (Dune, The Bene Gesserit methods, Litany against fear, transhumanist speculations of how and what humans can be capable of)

Installation

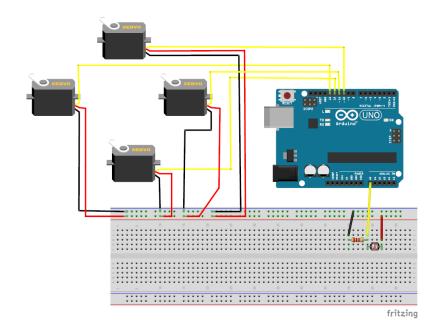


I have made four origami structures that open and close. I chose these for the impact of their movement. The change in shape is quite noticeable, even when the movement is less.

The origami structure is tied together using a pulley. The opening and closing is controlled using fish wire.



The light gray and off-white stripes around the origami are placed to create movement and direct the eye towards the sculpture. The placement of the origami is at 4 corners of the observer's vision's periphery. The idea is to have the observer focus on the movement rather than the objects themselves.



The sensor is connected to 4 servos using a single Arduino.

Each servo is connected to a pulley that is linked with the fish wires inside the origami structure. The pulley moves with he servo gear and pulls and pushes the origami structure to close and open respectively.





Interaction Workflow

The interaction for the observer is simple. The observer wears the breath sensor belt around diaphragm and enters the space near the installation. The sensor transmits data to the installation, and the installation starts to move, according to the observer's breath.

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