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*Toad Stools* Installation: digital film, sewing, sculpture

Is there a limit to how we can preserve the world? Are we only limited to our own perception of the world – to a single perspective? In my research, I explored different ways people can alter their perception of the world. For thousands of years, humans have found ways to enable our brains to perceive the world from a different perspective. I explored different methods and how they interact with human consciousness. The various methods I explored were how dreams, psychedelic substances, and surrealism could alter our perception of the world.

I had no idea what my project would be about when I started the writing process. This led me to the library with a pile of books ranging from Roman daily life to the study of time and space. However, the human brain stood out to me. Since I was a kid I have always been greatly interested in studying the human body and how anatomy relates to the human mind. Within the subject of the human mind, I was drawn to consciousness. I had many questions about how this entity works and was drawn to learning it in order to understand it. After my research and exploration, this led me to one big question: are humans truly only limited to what our minds perceive?

Throughout the week of art making, I struggled with the idea of my final goal. At some point in the week, I ended up in the sculpture studio where I started to sew. A majority of my week was spent sewing, then later creating other sculptural elements. The last part of this installation to be created was the video. The content of the video was a roadblock in my process, however, I decided to view it as a way to accent my whole installation, rather than something on its own.

I hope this installation creates an environment where people can immerse themselves and explore the idea of perceiving the world around them through a different perspective.

# Expanding Ones Mid:

# Altering Perception In Order to Find the

# Boundaries of the Human Brain



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OS48

Writer's Note: How can we perceive the world differently? As an artist, I often ask this question, and I am driven to open my mind to the world around me. This paper addresses both physical and mental ways the human brain is able to change its perception of the world around it.

### I. Introduction

The human brain truly fascinates me. It is a single organ in the human body that controls and allows the rest of the body to function. It is filled with great ideas which have changed the course of history. It is capable of extraordinary ideas, yet can also be capable of destruction. The anatomical structure of a brain is a complex maze of squishy brain matter that holds the ideas that make people who they are. The brain is a truly wondrous piece of evolutionary feet. I often ask if there is a limit to what the human brain can hold or think of. Throughout history, people have pushed the limits of the human brain. Is the human brain similar to the universe in that way? Is there a limit, or is it a never-ending complex of opportunity? If there is no limit though, then how can we push the boundaries of our minds?

Our brains not only hold information but also allow us to understand the world around us. It is a processing center for our senses; where the eyes meet the mind and create images; where the hands and feet create feelings of touch. However, are we only limited to what our brains sense? I often wonder how other people's senses affect the way they perceive the world. It makes me sad thinking that each person is limited in the way they perceive the world, but is there a way to change the way we perceive the world? I often ask this question, so I decided to study it. I wondered what it meant to perceive the world, is it relying only on our senses, or can it be hearing stories from someone else? Are we able to perceive the world other than the way we do day to day with our conscience? I have found that there are many ways to alter our perception of the world. Artists have the ability to visually show people how they perceive the world, which allows other people to understand how they view the world. This creates a visual ability for people to understand how other people might view the world and opens up different ways they can view the world themselves. Psychedelics alter the senses which often cause a mind trip in which people perceive the world in a way they often have never seen it before. Dreams expose our subconscious mind–our emotions or thoughts we did not know we had. Altering our perceptions allows us to view the world in a way other than reality, which then inhibits the expansion of our minds.

#### II. Human Perception of the World

The human brain relies on the body's senses in order to understand the environment. Through sight, touch, smell, taste, and hearing, people are able to comprehend the information into a world which they create in their mind. Although the human brain perceives this information, in order to understand it the human brain relies on the conscious. The human consciousness is a complex entity, and is one with many theories to try and understand how or why it is a thing (House, 2022). Each human has their own consciousness, which results in a different perception and understanding of the world. Since humans (and other organisms) have come on this Earth, they have almost all adapted in order to communicate with one another. The exaggeration of communication is a way for humans and other organisms to try and understand others' consciousness, their thoughts and feelings (House, 2022, 11). Each person lives their entire life through their consciousness, they are stuck with one mind, and one way of perceiving the world (House, 2022, 6). However, there are ways to expand our mind in order to perceive the world in a way other than our sense and consciousness.

#### III. Surrealism

The world is not limited by our senses and consciousness, and can be explored through visual expression. Surrealism was an art movement that gained popularity in the 1920s and '30s, centering in Paris between the two World Wars (Fowlie, 1966, 11). This movement was highly influenced by historical context: political unrest due to the World Wars that surrounded this movement. A feeling of revolution greatly influenced the movement, which evoked 'rules', set by artists for hundreds of years before, to be questioned and protested against by Surrealists artists. The Classicism movement, which was the prominent art movement before and at points during the Surrealist movement, often searched for order, control, and rules (Fowlie, 1966, 14). Many Surrealists set out to contradict these 'rules' and create a style of art dependent on one's subconscious rather than conscious reality, much like the Classist, Surrealists believed that an artist's more authentic being is within one's subconscious (Fowlie, 1966, 16).

Dream is commonly considered as the peak of the unconscious mind's experience, and a resource for the conscious analysis of that experience. The opening up of the field of possibilities was never more exciting to the group than in dream phenomena...Far beyond the dull colors of the real, as the young Surrealists perceived them, stretched this glorious uncontrollable openness, as far as the mind could reach (Caw, 1966, 21).

In many ways, Surrealists could be considered extremely influential in expanding awareness towards opening up one's mind to the human subconscious. In the decades before the movement, many artists trained to make art which nearly replicated the world around them. Although more abstract ideas and meaning were explored by these artists, they express the ideas through reality. In the decades following the Surrealist movement, an emphasis on the human subconscious and expanding the human mind through different substances would become popular in the Western world. The Surrealists movement was an introduction into exploring boundaries of the human mind. In the years following the Surrealists movement, more and more people became interested in expanding their mind. Specifically in the Western world, where these ideas may have been frowned upon; in contrast to many other parts of the world where this idea of expanding the mind has been practiced and celebrated for thousands of years.

Surrealism enables artists to explore a world outside of reality. Through different mediums of visual representation, artists replicate their own perception of the world, or rather their perception of the world they subconsciously create. This resulted in artwork that is often described as dreamlike or unreal, hence surrealism.

### **IV.** Psychedelics

Humans have used the medicinal properties of plants to their advantage for thousands of years (Roberts & Winkelman, 2007, 1). Our ancestors came across plants that held special properties which enhanced their well-being, health, and spirituality (Roberts & Winkelman, 2007, 1). In the case of psychedelics, they have been used by numerous civilizations for many purposes, such as spiritual practices and medicinal reasons. Some psychedelics, also known as hallucinogens, are naturally occurring, such as psilocybin, and have been a key role in many rituals for ancient civilizations. For example, the Aztec shamans would use the properties of psilocybin mushrooms to heal and in a variety of religious rituals (Nichols, 2016). Ancient Greeks from the village of Eleusis have been using psychedelics for over two-thousand years as a part of an annual all-night ceremony (Nichols, 2016). Psychedelics played a key role in many ancient civilizations where they harnessed the celebrated mind-opening properties.

The connection between early human species and psychedelic mushrooms provides an explanation for a certain theory which would explain the expansion of the human brain. This theory gave an answer to how the human brain grew so drastically and gave humans the ability to expand and grow to the point that they were able to create the world we live in today. It theorizes that early human species who walked on the plains of Africa would eat mushrooms in order to survive, however those mushrooms that they ate had psychedelic properties (Schwartxberg et al., 2019). As a result, early humans would experience the properties of psychedelic mushrooms, such as altered perception of the world. As a result of the altered perception, this would evoke early humans to perceive the world in an altered view through visual alteration of their surroundings. They might have seen more vibrant colors, movement in still objects, and an overall heightened sensitivity of senses. This may have inhibited brain development, or an expansion of the mind which would allow a flow of new ideas or emotion.

In addition to naturally occurring psychedelic plants, man-made drugs have been produced with similar effects, such as Lysergic acid diethylamide, more commonly referred to as LSD. LSD affects the brain in a way which is very similar to naturally occurring psychedelics. LSD is said to amplify the unconscious as well as alter the senses (Nichols, 2016). When on LSD, the human brain might encounter visual hallucinations, audio-visual synesthesia, and derealization or depersonalization (Nichols, 2016). Stanislav Groft, a Czech psychiatrist describes the,

"...the phenomena induced by LSD...cannot be predicted or understood in purely pharmacological terms; the personality of the drug taker plays an enormous and critical role in determining how much effect there will be and of what particular type" (Nichols, 2016).

The effects of psychedelics can vary, but an overarching effect that occurs while on the drug is altered perception (Nichols, 2016). The perception of the world is greatly changed through altered sensory perception, mood, sense of self, and perception of reality (Preller & Vollenweider, 2016). Through psychedelics, the mind is able to perceive a visual alteration of reality, which often results in people having a mind opening experience.

Much of the modern history of psychedelics revolves around the 1960s when heightened interests in psychedelics occurred. During this time period social change was rapidly occurring due to post-war times, which evoked strong oppressive emotions from many people (Roberts & Winkelman, 2007, 1). Much like the surrealist movement, people felt the emotions from the war and were driven to revolt. The 60's was filled with a major shift in culture and subculture, one of which was the 'hippie' movement. This movement is highly tied with the rise in psychedelic popularity, as it was a movement of change and spirituality. Although many people enjoyed the properties psychedelic could allow them, many people in social power felt threatened by their mind-opening properties (Roberts & Winkelman, 2007, 3). Some have discussed the government involved with LSD and other hallucination drugs. Theories have been created questioning if the centralized government felt threatened by the properties of these drugs (Roberts & Winkelman, 2007, 3). Perhaps the government felt threatened by the possibility of people opening up their minds which in result could cause a large cultural and social movement that the government was afraid of at the time.

Psychedelics are one of the many ways people physically alter the chemicals in their bodies in order to change their perception of the world. In more recent years, studies have been conducted in which people are micro-dosing with different psychedelics in order to treat different mental illnesses. As a result of taking the psychedelics, certain pathways in the brain are created or expanded, which enables treatment of the illness.

#### V. Dreams

Dreams are a conscious world created by the human brain where information is pulled from the human subconscious which, as a result, opens a door for people to explore their subconscious mind. Dreams are a mystery created by the human mind, an unknown consciousness that occurs while one is asleep. The reason why people dream is still unknown, however many theories have been created in an attempt to understand this natural phenomenon. The psychodynamic theory proposes that people dream in order to fulfill certain unconscious wishes, a way to visualize and inform the brain of wishes one might have but not realize (Nir & Tononi, 2010). On the other hand, activation-input-modulation takes a more scientific approach and outlines three factors that determine the conscious dream state: either the whole brain or regions of the brain have active levels; brain is activated internally or externally; and the ratio between aminergic to cholinergic neuromodulator cause the brain to dream(Nir & Tononi, 2010). The neurocognitive theory states that:

"Dreaming is what occurs when the mature brain is adequately activated, disconnected from external stimuli and without self-reflection. Once instigated, dreaming actively draws on memory schemas, general knowledge and episodic information to produce simulation of the world" (Nir & Tononi, 2010).

The connection between a person's real life experiences, concerns, and emotions and to the contents of the dream has been made, a reflection of someone's life that is reproduced while in an

unconscious mind by their own brain. For example, someone who faces strong anxieties in their real life might feel some of those strong emotions in their dreams.

Although the reason behind dreams is still uncertain, what is known is what occurs during a dream. When someone is in the headspace of dreaming, they are disconnected from the world around them and totally unaware of their environment, yet the brain is able to create its own conscious world (Nir & Tononi, 2010). Within a dream, the brain is often stimulated by highly sensory experiences, although it is unlike stimuli the brain gets when someone is awake and taking in the sense of the environment around them. Dreams often include high visual sensory with full color, shapes, and movement (Nir & Tononi, 2010). In addition, dreams also often incorporate recurring stimuli that someone might experience in a wake state such as faces, people, objects, and animals, which is very consistent with recurring emotions felt by someone in a wake state (Nir & Tononi, 2010). Dreams often include many other senses such as: sound, such as speech and conversation; tactile sense; smells or tastes; and pleasure and pain (Nir & Tononi, 2010).

While asleep, the human brain is able to create a world of its own, full of color, sound, and emotions all without stimuli from the outside world. With dreams I am able to recall, I remember a world that my brain subconsciously created. Within these dreams, I am sometimes able to gain inspiration or perceive something in the real world through a different view. Like the Surrealist encourages, dreams are opportunities from which people are able to pull inspiration from and discover emotions and thoughts from their subconscious mind.

### VI. Conclusion

If the human brain were only limited to the reality around us, advancements and developments in our society would be stagnant. The multitude of cultures, languages, and cities humans have built are dependent on new ideas. In order to create change and movement, the human brain needs to be inspired to open up and explore the limits of itself. The world around us would not have been created without pushing the boundaries of the human mind. The evolution of human society was only possible with people pushing the boundaries of the mind, expanding their mind in order to open it up to new possibilities. But, if humans are able to expand their mind, which resulted in society being created, can other organisms do the same; and if so why are there no other world scale societies run by other organisms? Another question I ask: Is there a need or a want for humans to alter their perception of the world, perhaps to expand their mind?

Although there is no answer to many of the questions that I ask, I think there is a need to continue the exploration of the human mind. I believe our future will be dependent on how we are able to expand our mind in order to continue expanding and improving our world.

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