PSYCHEDELICS AND THE CONSCIOUS MIND

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I researched psychedelics—not only the impact they have on an individual, but how psychedelic drugs influenced contemporary art from the 1960s to the present day. In the 1960s, there was a need to look outside of the dominant society and psychedelics allowed for a new thought process to expand consciousness.

Inspired by my research, I built a chair to invite the participant to "tune in and drop out" (the counterculture-era phrase that Timothy Leary, an American psychologist, popularized). Most chairs sit upright, but I designed a chair that one must lean back into. When you lean into something, you are less focused on people and distractions surrounding you. Because you are more relaxed, you are more focused on yourself and the present moment. My chair forces the participant to expand their awareness of the surrounding environment.

By sitting in my chair, the participant will be able to drop into a relaxed, altered consciousness. This state of mind might allow one to question authority and the norms that hold us from expressing alternative viewpoints.

Hana S

Can psychedelics expand our consciousness? Are there any medical uses to LSD and psilocybin? What are the effects of psychedelics on the individual and what are the effects of psychedelics on culture? My research explores drug culture from the 1960s to present day. Specifically, I chose to focus on the creation of LSD and its legal status to becoming this dangerous "forbidden fruit". Recently, scientists have been exploring psychedelics more deeply for medicinal and therapeutic purposes.

Introduction:

I've always been fascinated with the topic of psychedelics due to the lack of education on them. Psychedelics can change someone's life and I'd like to delve into their implications. Little did I know that Steve Jobs was an active user of psychedelics for many years before starting Apple. Daniel Kottke, a close friend of Steve and early Apple employee explained how they met and began taking LSD together. The two met at Reed College and became close after realizing they both read the book called Be Here Now, which is about psychedelics and spirituality. At this time in the 70's psychedelics were mixing with spirituality. Steve ended up taking Kottke to India, where they became "monk wannabees". Soon after Steve began working on Apple and Kottke would help Steve in his garage by testing computer boards and testing chips. Once Apple started, Steve stopped taking psychedelics and became very focused in making the company more successful. Steve Jobs said, "Taking LSD was a profound experience, one of the most important things in my life. LSD shows you that there's another side to the coin, and you can't remember it when it wears off, but you know it. It reinforced my sense of what was important creating great things instead of making money, putting things back into the stream of history and of human consciousness as much as I could," Personally, I have never tried psychedelics and I want to understand the effects this "mind altering" drug has on an individual's consciousness. Furthermore, I want to see how psychedelics have had a profound change in culture, more specifically the arts.

History of Psychedelics:

It wasn't until the 20th century that scientists began researching psychedelics and the effects the drug has on the body. On November 16, 1938, Albert Hofmann, a Swiss chemist combined lysergic acid diethylamide (LSD) when attempting to create a blood stimulant. Stimulants can enhance chemical effects in the brain. At first, Hofmann set aside the LSD because it wasn't the stimulant he anticipated but then five years later went back to further observe it. When Hofmann consumed a small dose through his fingers by accident he explains how he "sank into a not-unpleasant intoxicated-like condition, characterized by an extremely stimulated imagination. In a dreamlike state I perceived an uninterrupted stream of fantastic pictures, extraordinary shapes with intense, kaleidoscopic play of colors. After some two hours, this condition faded away" (Maugh, 2008). During the 1950's, Hofmann decided LSD could be very useful for psychotherapeutic uses. Hofmann's pharmaceutical company he worked for, Sandoz, began sending LSD and psilocybin (mushrooms) to clinics and universities all over the world (Kabi, 2016). In 1960, Sandoz Pharmaceutical delivered psychedelics to American psychologist Timothy Leary. Leary advocated the experimentation under the Harvard Psilocybin Project of psychedelic drugs for therapeutic reasons. He conducted the Concord Prison Experiment and the Marsh Chapel Experiment while LSD and psilocybin were legal in the U.S. The Concord Experiment was conducted between 1961-1963 and the purpose was to evaluate whether psilocybin and psychotherapy could encourage prisoners to leave their bad habits behind them once they were released. The recidivism rate of subjects who were given psilocybin was compared to the average for other Concord inmates. As a result of the experiment 25% of inmates on parole returned when the prior estimate of the Concord State Prison was that 64% of the 32 subjects would return to prison.

The second experiment occurred on Good Friday at Boston University's Marsh Chapel basement in 1962. Graduate student from Harvard, Walter N. Pahnke, conducted the experiment with the supervision of Timothy Leary. Pahnke wanted to see if psilocybin (active ingredient in

mushrooms) "would act as a reliable entheogen1 in religiously predisposed subjects." At random, divinity student volunteers from Boston were divided into two groups and half received psilocybin and the other half received a placebo drug, Niacin. As the niacin wore off, the psilocybin intensified. The students who took psilocybin reported having emotional religious experiences. Mike Young, one of the participants who would later become a Reverend, described the experience as life changing and eye-opening. He said, "The bars of color then resolved into a wheel, and I was at the center. There was a different color going out from me in every possible direction... I realized I had to swim out one of those color bars. Each of those color bars would be a whole different life experience... I had to choose one, and I couldn't. It was very painful, it felt like my insides were being ripped out of me, and I died" (Ruggiero, 2013). Another participant, Huston Smith, who would later become a religious scholar, called the trip "the most powerful homecoming I have ever experienced."

Timothy Leary popularized LSD during the 60s and because he encouraged Americans to "turn on, tune in, drop out" and to "think for yourself and question authority." Leary began referring to LSD as "ecstasy," meaning an overwhelming feeling of great happiness or joyful excitement. The spread of the drug created an entire hippie counterculture of drug abuse. The hippie counterculture movement consisted of two groups, the New Left and a broader group which focused on equal rights for all in order to end discrimination based on race, ethnicity, and gender. The New Left was the main opposition of the Vietnam War and both groups goal was to create this sort of "utopian" world where there was no violence and discrimination and just love and peace. LSD became a huge aspect in the lives of these hippies because they believed "it was an essential part of their rejection of the "establishment" (U.S. History in Context, 2005). When LSD began to be abused by these hippies, "Psychedelics became symbols of youthful rebellion, social upheaval, and political dissent" (Bakalar, 1997). In 1967, the government made psychedelics an illegal substance.

Psychedelics & Our Consciousness:

Consciousness is the state of being awake and aware of one's surroundings. Humans struggle with finding our inner consciousness. We are aware it exists "when we think, when we dream, when we savor tastes and aromas, when we hear a great symphony, when we fall in love. Yet, no one can really claim to have understood and explained it completely" (Hancock, 2015). How does consciousness work in our brain and how does it allow us to have experiences? Psychedelics can take us further beyond our normal consciousness. In Latin, psyche is your mind and soul while delos, or delic, is to reveal.

Sigmund Freud is an Austrian neurologist who came up with the concept of psychoanalysis. Freud's work has had a large influence on Western and popular culture. He studied cocaine and it's effects as an analgesic. Freud argued that dreams are a window into the unconscious rural road. "Properly speaking, the unconscious is the real psychic; its inner nature is just as unknown to us as the reality of the external world, and it is just as imperfectly reported to us through the data of consciousness as is the external world through the indications of our sensory organs," (Freud 224). The effects of psychedelics can put you in an almost infant-like state. While inebriated you will experience a feeling almost seeing a new world and being very curious, as a baby would. Along with this you may also feel extreme mood swings, the same way

¹ An authentic chemical substance, typically of plant origin, ingested for spiritual religious purposes, that alters conscious

a baby can go from laughing to crying in a split second. Dopamine and endorphins are released from the brain and nervous system, resulting this results in an analgesic effect. The brain contributes to a more visual experience on LSD, like a dream state.

Psychedelic Consciousness & Art:

Even before LSD became widespread in the 60s, artists like Salvador Dali and Max Ernst

were a part of the Surrealism movement in the 1920s. Founded by André Breton, the aim of Surrealism was to "resolve the previously contradictory conditions of dream and reality." This movements work was surprising and opposed rationality. The artists abstracted depicted expressions and followed the Marxist dialectic.2 Surrealist artists attempted to channel the unconscious as a way to unlock the power of our creative and imaginative mind.

The overall goal of a psychedelic artist is to depict one's experience Art critic, Ken Johnson, shares a very similar opinion with me to how the drugs of the 60s changed art. Johnson said that during the 60s "some kind of awakening took place in art...and the creative and intellectual energies that were brought to life are still feeding the imaginations of artists today" (Grimberg, 2011). This mind-altering experience sparked a psychedelic revolution and culture. Psychedelic art was first seen on rock posters, graphic art, and aelbum covers. Fine art became really altered in the 60's due to "a change



and concern of the evolution of aesthetics to a concern with consciousness" (Johnson).

Harvard Amason's History of Modern Art published in 1968 said "The recent appearance of psychedelic art may be accounted for in several ways: the easy availability; the mixture and confusion of appeals to several senses simultaneously in the so-called mixed media performances; the ethos of the hippies and flower children; and the prevalent atmosphere of rebellion against the establishment". This sense of rebellion against establishment and society also posed a challenge to art specifically (Blauvelt, 16). Although "one did not have to consume psychedelic drugs to encounter a psychedelic aesthetic sensibility," many artists during the 60's did experiment with mind-altering drugs like LSD and psilocybin. There is "no difference between the artist and the audience undergoing an altered state of consciousness." Psychedelic art "poses abstract properties of extreme color and kaleidoscopic space." This type of art can often be labeled as surrealist or "magic realist" (Rubin, 16).

Artists like Yayoi Kusama and Issac Abrams were both directly influenced by psychedelics or hallucinations. Japanese artist, Yayoi Kusama, had suffered from hallucinations since childhood. Her stylistic format that she calls Infinity Nets of dense clusters of cellular forms are inspired by her own hallucinations. Kusama states, "One day, looking at a red flower-patterned table cloth on the table, I turned my eyes to the ceiling and saw the same flower pattern everywhere, even on the window glass and posts. The room, my body, the entire universe was filled with it, my self was eliminated, and I had returned and been reduced to the infinity of

² a philosophy of science and nature



eternal time and the absolute of space. This was not illusion but reality". Kusama's Infinity Mirror Room, installed in 1965, allows for the viewer to "become part of the unity of our environment and obliterate our selves with love" (Rubin, 17).

On the other hand Issac Abrams a self taught artist from New York with an academic background in science and psychology actually experimented with psychedelics. He discovered there had to be such a thing as psychedelic art and in 1965, Abrams founded the Coda Gallery in lower Manhattan. The gallery featured paintings, sculptures, and mixed media light shows all under the labeling of "psychedelic art" (Rubin, 21). Abrams believed his psychedelic experiences opened doors to other universes. He said, "within

these universes I have encountered spirits who identified themselves by name. I have had inner body experiences, flowing through my own bloodstream, nervous system and gender identities, and out of body experiences, flying, animals forms and above all conscious formlessness leading to an identification with the singularity of creation and the total inter-connectedness of nature" (Rubin, 21). Abrams's painting 'Hello Dali' displays vibrant colors and areas of surrealism like the mountains in the sky, the faces, and the hidden eye. Although it is not stated that Abram's was on psychedelics while painting 'Hello Dali' it is clear to me that he felt a strong connection to nature and the external environment.

Benefits of Psychedelics: Medicinal Uses

Avelet Waldman is a novelist, essayist, screenwriter, and activist. She lives in Berkeley, California, with her husband, Michael Chabon, and their four children. Waldman did a monthlong experiment where she took tiny doses of LSD in an attempt to treat her mood changes. Her goal was clear: "She hoped to make herself a less volatile mother and wife" (Heller, 2017). Waldman's "experiment challenged a popular image of the drug: dropping out, hallucinating in parks, and other dubious perks of the nineteen sixties" (Heller, 2017). Waldman explains that when her relationship got rocky, Waldman and her husband would take MDMA and then discuss their love for hours. Waldman emphasizes the importance of testing drugs before taking them. Many young people are eager to get their hands on MDMA which can easily be be laced with many other dangerous substances. She also advocates that long lasting couples be the only ones who ingest MDMA. She say's "I believe that with whom you do MDMA for the first time might even be more important that with whom you have sex with the first time." Waldman is not a spokeswoman for drugs (unless for the anti-stress use of psychedelics) and does not use any other drugs recreationally. She has never experienced an "acid trip" and is not a fan of Timothy Leary, though the two both experimented with micro-doses. Before beginning her LSD regimen she had been prescribed to Celexa, Lexapro, Prozac, Adderall, Zoloft, Ritalin, Xanax, Valium, Topamax, Lamictal, and others after being diagnosed with Bipolar II disorder. The prescribed drugs had negative side effects and did not help for long. Waldman's prescriptions failed to work when she entered menopause and her mood spiraled out of control. She sought out help from James Fadiman, a psychedelics researcher who developed a micro-dosing regimen.

Waldman's Post LSD experimentation:

"I feel happy"

"Not giddy or out of control, just at ease with myself and the world. When I think about my husband and my children, I feel a sense of love and security. I am not anxious for them or annoyed with them. When I think of my work, I feel optimistic, brimming with ideas, yet not spilling over."

"I want people who would never consider psychedelic drugs to read this and think, wait a minute. Maybe this is not so crazy" - in regards to her book, A Really Good Day: How Micro-dosing Made a Mega Difference in My Mood, My Marriage, and My Life

"It was almost the first time in my life I had a perspective on what my moods are. Now, when I slip back into the bad feelings, I know it could get better overnight. And also: there is better."

Waldman's adhesive capsulitis of her shoulder that she had been dealing with for years disappeared just after a month of micro-dosing. LSD is non addictive and there are more deadly overdoses from the misusing of Tylenol than there are of psychedelic overdoses. Before micro-dosing Waldman had thoughts of suicide and feared she would destroy her relationship with her family. Michael Pollan, researcher of psychedelics and writer for The New Yorker, explained how psychedelics have been "directed towards conditions such as anxiety and depression."

Dangers of Psychedelics/What LSD Does to your Brain

There's aspect of psychedelics that I truly believe are helpful but psychedelics have an incredibly strong effect on the brain, which can be very dangerous to the individual. For example a study published in the journal cell press found that hallucinogens like LSD affect serotonin receptors called 5-HT2A receptors (2ARs) in the brain (Cell Press, 2007). Serotonin is a neurotransmitter, which ultimately controls our moods and feelings. Psychopharmacologist, Clare Stanford at the University of London believes "serotonin helps keep a handle on perception and actually stops us from hallucinating". So when you're on LSD and your serotonin receptors are blocked, your brain loses its control of perception. Yale psychiatrist, Andrew Sewell who studies psychedelics drugs believes LSD enhances perception but lowers activity in your thalamus. The thalamus "sits at the center of the brain and filters sensory information from all your nerves". So when you're on psychedelics your brain allows you to attain even more information coming into your system. "Sights and sounds become louder or brighter and you might start seeing things you never noticed before". In a "2010 study that attempted to quantify the social harm posed by each commonly used psychoactive drug in the U.K." LSD was compared to more common drugs like alcohol and cannabis and was found to be one of the least harmful drugs to both the user and others (Mckay, 2015). It's important to keep in mind that not every person who tries psychedelics is going to have a good experience. Setting is very important and so is going in with the right mindset. If you are fearful of the effect that psychedelics are going to have on you, then during your whole "trip" that fear will follow you. Another negative aspect that comes along with psychedelics is that a one-time taker of LSD can develop "acid flashbacks'. Meaning that one trip can affect a person's brain so much that days, months, or years later you could hallucinate again. In a recent case study published in the Israel Journal of Psychiatry it was found that a person developed "Alice in Wonderland Syndrome". The patient in the study who had a history of using LSD frequently began seeing things smaller or larger

than they really are (Pappas, 2015).

So what does one of the most commonly used psychedelics, LSD, actually do to your brain? 15 people who are experienced users of LSD were given a small amount (75 micrograms) and had their brains scanned. The experiment occurred in London since it is not illegal to use lysergic acid diethylamide for research purposes. There was a general consensus of all the 15 participants that they felt a loss of self-identity and had a better connection to the environment. Enzo Tagliazucchi, a neuroscientist at the Royal Netherlands Academy of Arts and Science in Amsterdam says "you don't recognize yourself as a separate being from the universe" in regards to taking LSD. He say's "It feels, in a way, like transferring the consciousness from within your body to the outside world; the focus is in the objects that surround your rather than inside". Tagliazucchi and the other scientists specifically wanted to see the effect of LSD on one's feeling of ego dissolution. The regions of the brain involved in introspection and sensory areas that perceive the outside world, were discovered to have networks communicating more greatly than ever before. The subjects who were "blown away by LSD were the ones who "had the strongest communication between the network of regions in charge of introspection and the network of regions in charge of perceiving the external world". Researchers found that LSD changes visual information in the brain. For therapeutic reasons psychedelics could provide a few hours to break out of constricted thought patterns" (Oaklander, 2016).

Conclusion

We live in a "dominator" society that wants us to believe that there is no other "world" and things should be left simple without any confusion or further thinking. Psychedelics threaten democratic and "dominator" societies because "there is something about them that casts doubts on the validity of reality" (Lin, 2014). Drugs have had a negative connotation throughout history and have been seen as an act of "youth rebellion". Personally, I have many friends who abuse drugs but also a handful of friends who take drugs only when making art to further creativity. Although psychedelics may have a negative impact on the brain, I believe it expands our consciousness and creativity.

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