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Simon Haiduk, "My Awakening," oil on canvas, 2004, courtesy of the artist

PSYCHEDELIC EXPERIENCE

Where abstraction meets reality.

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ur society is, in many ways, based in the material world, causing us to perceive reality in a practical way. From childhood, we learn to refer to objects by their names, which allows us to

communicate effectively and function efficiently in society. Such conditioning is instrumental in precisely communicating something about the so-called "objective reality." Conversely, when we speak about something almost impossible to measure by objective measures – our inner states, feelings, dreams, or emotions – we will usually have to resort to more figurative or even poetic language. Similarly, other forms of communication, such as singing, dance, or visual art, have become indispensable means of expression, especially for subjective experiences, intense emotions, or mystical states. Art reminds us that there exist aspects of



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humanity, and hence of reality, beyond the ones that we can measure using scientific methods, and despite the lack of reliable tools to quantify them, they are undoubtedly an inherent part of the human experience.

Reaching the truth

Both the scientific and artistic methodologies share a similar goal of arriving at the truth and communicating it. Even though the artist's path to reaching the truth and their way of conveying it differ significantly from scientific methods, inspiration and creativity, which are an indispensable element of the creative process in art, are also not unfamiliar to scientists. Without inspiration and creativity, it would not be possible to posit bold hypotheses, and these, in turn, are essentially the basis for a deeper understanding of the world and its relations. On the other hand, due to fundamental differences between the scientific and artistic approach, it might seem that the advancement of civilization should be based solely on scientific achievements. History has yet shown that both cities and societies alike are shaped through the interplay of science and art. One example of this is architecture, which can tell a great deal about the development of

Masked anthropomorph
with a body-outline
entirely covered by
mushroom images,
Matalem-Amazar (Tassili,
Algeria), photograph by
Jean-Dominique Lajoux
(1964) taken from Giorgio
Samorini's publication
The Oldest
Representations

of Hallucinogenic

(Sahara Desert, 9000–7000 B.P.), 1992

Mushrooms in the World



science and the main trends in art of a given culture. Despite the lack of empirical evidence, art remains extremely important in preserving a sense of aesthetics and setting social trends, both of which can inspire civilizations and shape societies' perceptions of reality.

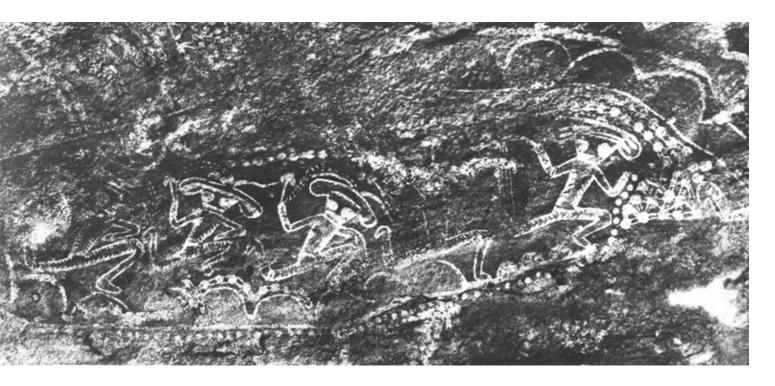
Veil of reality

At this point, however, we arrive back at the beginning. The patterns set by practicality make us look at life through a certain filter - our art, beliefs, and culture are lenses through which we perceive the world. This is well illustrated in the eating habits of different cultures - in Poland, a venue selling dog-meat cutlets would spark both a sensation and outrage. Still, a stall selling hamburgers made from cow's meat will hardly cause any objection. However, the issue here is not only our sensitivity but also the language we use, including our internal monologue, which shapes our lives minute by minute. Some light is shed on this subject by the Sapir-Whorf hypothesis, which highlights the relativity between language and our perception of the world. Although still controversial, there is a growing body of research supporting it. In a series of four studies published in the Journal of Personality, bilingual speakers of Chinese and English showed higher levels of dialectical thinking when speaking in Chinese than in English. There is no need for us to demonstrate whether this is due to our language, culture or the interaction between the two - we can agree that our experiences and environment have a real impact on how we view ourselves and the world.

One way we can look at the world in an unbiased fashion is through the regular and consistent practice of meditation. Meditation has the potential to give us a non-dualistic view of the world and provide insight into our own habits of thought and behavior. A second method, which in the last few years has come back into favor in government regulations and thus also in scientific research, involves the use of psychedelics. As the name suggests - the word "psychedelic" deriving from the Greek words "psyche" (soul, mind) and "deloun" (to manifest) - psychedelic substances, or psychedelic experiences, can reveal the depths of our minds that we are not privy to in our everyday state of consciousness. These substances are also referred to as entheogens - a word which roughly means that they allow us to experience god or divinity. However, for the purposes of this article, we will stay with the term psychedelics.

Homo sapiens and psychedelics

On the one hand, the prospect of looking inside oneself can be frightening; on the other hand, it can also be fascinating. And it is this fascination that prevailed



in the human race. All ancient cultures, except the Inuit, have a history of using psychedelics.

Moreover, the first evidence of psychedelic use goes back at least 7,000 years. Cave paintings in northern Algeria, depicting scenes of mushroom worship, leave little doubt that the hunter-gatherers living then already appreciated their properties. The fruiting bodies shown in the paintings most likely belong to the Psilocybe or Panaeolus species. They are known to grow on cattle dung, which is abundant in those regions. Like I said, this is certainly not an isolated case, for, over the centuries, psychoactive plants have made their mark on human history in almost every corner of the world. During the Eleusinian mysteries held in ancient Greece, a ritual drink known as kykeon - composed of barley, mint, and water - was consumed. Through careful analysis of ancient texts and chemical analysis of Greek vessels, we now know that ergot, a fungus that is a crop parasite and produces toxic and psychoactive alkaloids, was behind the unique properties of kykeon. It is not far from ancient Greece to the dawn of Christianity, which interacted with each other for many years. Furthermore, there are numerous examples of early Christian art depicting mushrooms and biblical descriptions of mystical visions that are not far-removed from psychedelic experiences. Hence, many scholars and historians have taken as plausible the thesis that the sacrament described in the Bible had kykeon-like properties. The above examples represent only the tip of the iceberg, for psychedelics have been a crucial part of beliefs and cultures worldwide. There is also a hypothesis

proposed by Terence McKenna, that hallucinogenic mushrooms may have played an important role in human evolution. We still do not have enough evidence to confirm this, but it is nevertheless an intriguing possibility that more and more people are beginning to entertain seriously. To understand why so much credit is given to psychedelics, it is essential to examine the effects of these substances.

In search of meaning

One of the properties of psychedelics that has cemented their importance in countless cultures and religions is their ability to make any experience feel more meaningful. Both experiential accounts and clinical studies show that the vast majority of people who have had the opportunity to experience altered states of consciousness induced by psychedelics consider it to be one of the most meaningful experiences in their lives - or indeed the most meaningful. Many of these experiences are described as mystical or spiritual, during which a person is allowed to experience reality in an intensified, profound, and indescribable way. Because of their properties, psychedelics make such mystical experiences seem far more significant than corresponding experiences obtained without them. As one can guess, such a boundless experience does not simply pass without leaving a mark on a person. Not only can the action of psychedelics induce an inner transformation, but these changes, such as in the case of psilocybin, which is the active substance of hallucinogenic mushrooms, can alter

Dancing masked anthropomorphs holding mushrooms, Tin-Tazarift (Tassili, Algeria), photograph by Jean-Dominique Lajoux (1964) is from Giorgio Samorini's publication The Oldest Representations of Hallucinogenic Mushrooms in the World (Sahara Desert, 9000–7000 B.P.), 1992



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Simon Haiduk, "Dream Glade Metta," digital image, 2012, courtesy of the artist



neural connections. This is one of the sources of their therapeutic properties come from. But before we get to that, let's take a moment to look at 5-HT2a receptors, which can bind both serotonin and psychoactive molecules such as LSD or psilocybin, the latter being 5-HT2a antagonists. SSRIs, by down-regulating 5-HT2a receptor activity, allow people with depression and other mental health problems to better cope with challenging conditions. Unfortunately, SSRIs come with side effects such as suppressing feelings of some stimuli and emotions. On the other hand, psychedelic substances produce the opposite effect - they intensify experiences and broaden the sense of meaning, which is very difficult to find in the current information-overloaded world. This lack of meaning may be one of the reasons for the growing incidence of depression and the number of suicides in highly developed countries. For this reason, allowing western medicine to open up to therapeutic practices that have been proven to work for hundreds and thousands of years can improve the mental well-being of many people.

Psychedelics and creativity

From cave paintings to the invention of the quantum microscope, nothing that humanity has created would have come about without human creativity. Psychological models define it as "a dynamic form of cognition that is based on multiple cognitive processes – creative idea generation, and creative evaluation, in particular." Still, there continues to be no consensus on what it actually is. The psychedelic state "is a powerful driver for the generation of creative ideas," and

psychedelics are "a useful tool in the neuroscience of creativity." Creativity is an incredibly fascinating phenomenon, as it operates in our civilization in compliance with the second law of thermodynamics – it increases the amount of information while steadily increasing the level of entropy. A certain level of entropy is necessary to make use of creativity, as seen on functional magnetic resonance imaging. According to one study, during musical improvisation, entropy levels in real-time are higher in both performers and audience than when playing from music sheets. Similarly, scans of people under the influence of psychedelic substances such as psilocybin, DMT, or LSD show elevated levels of entropy.

Traversing the boundaries of reality

It is only in the last couple of years that it has become possible to publish the kind of research cited in this article, due to prohibitive measures that were in place in the United States since the Nixon administration. Artists, however, have certainly not been idle during this time. While scientists' hands were tied during these decades, numerous artists created works of art to convey their perception of the mystical psychedelic experiences. As they say, "a picture is worth a thousand words," and in the case of experiences as profound as those induced by these substances, one could argue that it is worth even more.

The psychedelic experience is also often referred to as a "trip" because psychedelics have the remarkable ability to guide us through the depths of our minds, consciousness, and otherwise inaccessible realities; they show us visions that are beautiful but sometimes also frightening. After consuming large amounts of psilocybin, for example, time loses its meaning. The past and future become an abstraction - there is only the here and now, clearer than ever. At that moment, we are dependent on whatever the mushrooms want to show us. The sensation ripples, intensifies, and then wanes. Then another wave comes. We gaze upon a tree that is no longer just a tree - it is full of life and consciousness. It is a divine creation that emanates energy and changes its structure while becoming more pronounced. The bulges on the bark disappear and appear in other places, in real time, which we had long forgotten. We turn around. We notice the glow of the sun, shimmering in colors so intense, unlike anything we've ever seen before. The wave passes. We sit under that tree, suddenly aware of the awesomeness of this indescribable experience, for we had never learned the language of that world. And then comes another wave...

The cult Polish artist Stanisław Ignacy Witkiewicz, known by his artistic name Witkacy, made no secret of his fascination with psychedelics, namely mescaline, which he had the opportunity to try. It is a psychoactive compound found in cacti such as peyote (Lophophora williamsii) or san pedro (Echinopsis pachanoi). He described his experience with peyote as visually rich: "I was simply crushed by a landslide of magnificent visions, and in a state of bewilderment that was more visual than mental, I attempted to roughly explain why I was seeing this and not something else." At the same time, he was impressed by the realism and accuracy of the peyote visions, which he found to be "incomparably more true and precise than in reality or in fantasy" and have "incredible clarity." However, as he admitted, his experience with peyote was not a pleasant one, possibly due to his lack of prior preparation. Psychedelics should not be approached hastily, with no thorough preparation or education about them, and even then they are not for everyone. Despite his reasonably difficult "trip," Witkacy considered peyote's "sporadic use utterly harmless." He also noted that it was practically impossible to become addicted to mescaline – on the contrary, he claimed, peyote allowed him to peer deep inside himself and realize the harmful effects of other drugs. He concluded his description of peyote as follows: "Down with nicotine, alcohol, and all the 'white frenzies.' If peyote proves to be a general antidote to all these vile substances, then in this case, and in this case only: Long live peyote!" Documenting his experiences with peyote, he added: "Only peyote could have engendered such clever things as sculpture and painting. (...) such things as the ancient styles in sculpture and architecture could not have

been created without visions." He also wrote, "The Chinese must have known peyote. It explains all the dragons and all of India. The initiated = artists." Of course, ancient Asian cultures had questionable access to peyote, which is found in America, but there are records of other psychedelic substances in traditional Chinese medicine. Of these, 笑菌 (xiàojùn), or "laughter mushrooms," could have been particularly significant. Nonetheless, if the creation of dragons was inspired by psychoactive substances, it is questionable that it was mushrooms.

Thanks to artists, we can get a certain taste of this immeasurable experience without having to go over to the "other side" ourselves. The works of art featured in this article, created by Simon Haiduk, show the magic of nature, which is perceived slightly differently by our senses in our ordinary state of consciousness. It is also worth noting that his paintings are also available as animations accompanied by music, which allows us to immerse ourselves in his works on another level. The art of artists such as Alex Grey, Android Jones, Chris Dyer, and many others lets us peek through the veil without having to cross it. As Simon himself writes, he seeks to create art that "inspires harmony between the Earth and its shared inhabitants," and each of his works reflects an aspect of his "life journey, thinning the veil between physical and metaphysical realities."

The future of psychedelics

For thousands of years, psychedelics bridged the gap between reality, the supernatural world, and faith, the latter of which – modern research shows – is an integral part of psychological well-being. Drawing psychedelics into discussions on philosophy, art, psychology, ethnology, history, and other scientific fields can open us up to new perspectives and broaden our understanding of the world. If introduced in a regulated and responsible manner into therapy and society, psychedelics have the potential to affect people positively on many levels by increasing empathy, mindfulness, and respect for nature; they can help treat mental illness and assist in coping with trauma; and even help reduce crime and aggression.

As we know, when used improperly or irresponsibly, psychedelics can produce undesirable results. That makes societies and governments in many countries reluctant to decriminalize them. It is crucial that research, education, and public awareness should go hand in hand with liberal legislation. A responsible approach to the subject of psychedelics will unlock their potential. And one day, we may learn the secrets behind the psychedelic experience, which has often been and continues to be an inspiration to many artists, thinkers, scientists, and inventors.

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