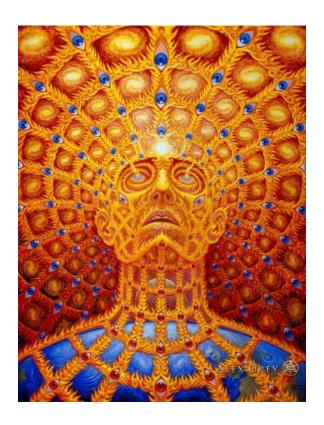
# Beyond the Psychedelic Experience

House 44.2, - 1st semester - autumn 2016



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# **Abstract**

Our paper aims to uncover general misconceptions of psychedelic substances and reveal how its use can be beneficial to individuals and societies. Through the process of gaining knowledge of the psychedelic experience from a subjective perspective, we are investigating the optimal way to implement psychedelics, as a tool, for reaching an expanded consciousness. Our project serves as an answer to questions, such as could Western societies benefit from the use of psychedelics, what are their role in tribal cultures and how can they benefit us. The project consists of a detailed description of relevant psychedelics, as well as a thoroughly detailed and researched overview of the experience and state of mind that is induced by the psychedelic substances. In addition to this, an in depth analysis has been made of the Daniel Pinchbeck's book "Breaking open the head", comparing it to Timothy Leary's account from the book "Psychedelic Experience: a Manual Based on the Tibetan Book of Dead", and the phenomenological accounts of a vast amount of subjective user reports of psychedelic trips. The paper ends with a discussion consisting of several different topics relevant to the problem at hand, such as an overview of the possible medical benefits of psychedelics, and the highly relevant role of Set and Setting.

# Motivated Introduction

As we are a part of today's youth, along with every other generation of youth, our underlying social function is to push the social boundaries of our civilised society. Therefore, when confronted by social taboo's merged with collective ignorance regarding a highly important and truly interesting subject, our fundamental desire to seek the truth kicked in. This deal of misinformation and media manipulation regarding the effects of psychedelics is the spark that ignited our flame of interest. If you pick up any book written on the experience induced by psychedelic substances, you will be introduced to a world of wonders, a world of possibilities. This revelation is what lead us to question the mystery of why our society has chosen to portray psychedelic drugs in a way that is Astronomical Units away from the truth and to

figure out how, what we now consider a tool of wonders, has benefitted different cultures and societies throughout our collective human history.

# 1.Introduction

"We live in a world of media overload and data smog, where everything distracts us from everything else. Yet underlying this noisy assault, our culture offers us nothing transcendent. No deeper meaning, no abiding hope. In my crisis, every facet of the contemporary world seems part of a diabolical mechanism carefully designed to keep people from wondering about the real purpose of their endless frantic activity."

Pinchbeck (2002, p. 16)

Throughout time, humans have been actively seeking answers to the question regarding the very nature of our existence, such as: what is our purpose? In some cultures, mainly in South America and Eastern cultures, the use of psychedelics have played a central role in their search for spiritual awareness or understanding. By eating certain psychedelic roots or plants, indigenous tribes have relied on the visions and experiences, as a direct link to their God or a different dimension. In Western culture, religion is known for having similar effects as those of psychedelics, giving religious people certainty and something to believe in, quenching their thirst for a greater purpose. But as the quote indicates, contemporary Western societies do not offer or directly encourage any forms of transcendental experiences or allow people to think for themselves. Western society has been ridiculing and repressing the use of psychedelic drugs, mainly since the war on drugs, for the past 50 years. "The new consumer culture of the nineteenth century induced a widespread trance in the public, as capitalism breathed supernatural power into its products. The World Exhibits, the Belle Epoque's celebrations of global commerce, open up a phantasmagoria that people enter to be amused.

The entertainment industry facilitates this by elevating people to the status of commodities. They submit to being manipulated while enjoying their alienation from themselves and others" (Pinchbeck, 2002, p 57). Pinchbeck's idea regarding the Western world as a consumer-culture refers to a world where the only value is the materialist value and the self is shaped by the capitalistic powers. In this manipulative environment, there is no future for self-exploration or consciousness expanding. The Western culture often defines people who dare to think big or differently as dreamers<sup>1</sup>.

#### Notes on references

A major part of our information has been gathered using the website Erowid.org. Erowid.org is a member-supported organization providing access to reliable, non-judgmental information about psychedelic plants, chemicals and related issues. All of our user reports of psychedelic use originate from this website. Due to the fact that the majority of them have been labelled as anonymous, making them hard to distinguish between, we have decided to name them ourselves. Every unique report used has been given a specific name accompanied by a number, such as: Erowid user 1, 2, 3 etc. These are the names that we are going to refer to throughout the text, and they all are linked to a specific web link in the reference list. The same system has been implemented for other websites classifying them as Website 1, 2, 3 etc. with a corresponding link and relevant information in the reference list.

## Problem field

Psychedelics and the psychedelic experience are considered to be mind-altering and the key to spiritual awareness, which many people find very desirable. However, they are forbidden

<sup>1</sup> a person whose ideas or projects are considered audacious or highly speculative; visionary

to use in many societies. It is a social taboo and considered to be dangerous in most of the world. We have chosen to investigate why psychedelics are revered in tribal societies but tabooed and prohibited in other cultures. We have a specific interest in the cultural implications of the psychedelic experience and how the experience affects the user itself. We would like to understand why there has been an undergoing 'war' against psychedelics.

We have chosen the phenomenological approach to explore how the psychedelic experience is interpreted if there is any factor, which affects the experience and if there is any cultural or personal implications. To find answers for this, we will analyze different encounters with the psychedelic experience to figure out the contributing factors, if there is any. Through our own interest in consciousness and how psychedelics are said to have mind-altering abilities, we want to explore the cultural implications and the self-exploration from a spiritual point of view. This will be done by looking at different subjective accounts of the psychedelic experience and try to connect the different experiences. Our project will therefore recognize and work with the experiences as subjective realities for each user, to enable us to understand how the experience affects each user in different ways but often with similar results and benefits (Website 1, 2016).

#### **Problem Formulation**

What is the psychedelic experience and what are the cultural and personal implications?

#### **Dimensions**

This project will cover the dimensions of <u>Subjectivity and Learning</u> and <u>Philosophy and Science</u>.

<u>Subjectivity and Learning</u> will be covered by applying the phenomenological approach. We are analyzing different subjective accounts of the psychedelic experience as phenomena. It will enable us to understand how the psychedelic experience appears and affects each user,

since most of these experiences, feelings and changes are non-measurable. Through the understanding of the subjective experience, we want to compare the accounts with Timothy Leary's theory of the psychedelic experience.

<u>Philosophy and Science</u> plays an important role when we investigate the psychedelic experience. The psychedelic experience is for many cultures and users considered as mind altering and as a cognitive change. Our phenomenological approach allows us to look at different accounts of the psychedelic experience and analyze each subjective experience as real events. With Leary's description of the experience, based on the Tibetan book of death we can analyze and discuss the experience from a philosophical viewpoint in order to understand the influence of the cognitive changes.

#### **Delimitations**

Due to the Danish law, we have not been able to personally experiment with different psychedelic substances. However, we wanted to interview users who had been through a shamanistic psychedelic ritual, but unfortunately our efforts to arrange this was unsuccessful. Therefore, our project is mainly focusing on analyzing other people's experiences and accounts with psychedelics, based on books and the website called Erowid.org, where many subjective reports are given. During our project, we have done research on different cultures and their specific use of psychedelics. Many of these cultures and tribes use psychedelic substances during different sacred rituals and ceremonies, which plays a central role in their understanding of the world. We discussed whether or not we should visit a tribe, to get a personal understanding of the importance of these rituals and the role they play in their culture. Unfortunately due to financial limitations and the lack of time we have not been able to do so.

# Phenomenology

We have chosen the phenomenological approach, due to our interest in exploring the effects and the results of the psychedelic experience based on people's first-hand experiences. Phenomenology as a theory of science focuses on the subjective first-hand experience and is considered to be a transcendental philosophical analysis. The school of phenomenology was established by the German philosopher Edmund Gustav Albrecht Husserl (1859-1938) who is still today a renowned person in contemporary philosophical society.

If we want to understand the basic principles of understanding the subjective account, we have to prerequisite the first-hand perspective (Collin, Køppe: 2002). The first-hand experience, even though it is subjective, is highly important according to phenomenological researchers. According to phenomenological theory, to be able to understand how objects or experiences appear and function, each subjective experience whether it is something physical, mathematical models, social relations or cultural products, has to be taken into consideration. Taking the subjective understanding into consideration, phenomenological theorists look for coherence between the subjective experiences also known as a phenomenon and how it affects or relates to the world. In our daily life the word phenomenon is usually used as a contradiction to physical reality or something extraordinary (Website 2, 2016). According to Maurice Merleau-Ponty, you cannot separate subjectivity from the world like you cannot separate the world from subjectivity (Merleau-Ponty, 1945, p. 491-492). Phenomenologist investigates the first-hand experience, as a consciousness of how the phenomenon appears to the subject and not how it appears to the world, this is also known as bracketing. Most phenomenologists would claim that the world as it appears to you, through perception, our practical life or in scientific analysis is the only real world. According to phenomenology the claim of a world behind the subjective experience, a world which overwrites any appearance, experience or conceptual evidence you might have had, is lacking evidence and should be considered as empty speculative thoughts (Collin, Køppe, 2002 p.128). Phenomenology does not wish to distinct between the appearance and reality since some appearances can be misleading. But they don't see it as a distinction between two

separate regions, but as an intern distinction belonging to the world as it appears to us. So when using phenomenology as an approach, we don't look behind the appearance to the find what is real. "If we wish to understand the nature of an object, we should put interest into the way it manifests and it appears, whether through experiences or scientific analysis. The objects reality is not hidden behind the phenomena but unfolds right through it" (Collin, Køppe, 2002 p.128).

# A transcendental philosophical approach

"If we want to understand the basic principle, which acceptance, truth, meaning, reason is underlying, we have to include first-hand perspective as an unavoidable condition" (Collin, Køppe, 2002 p.129). According to phenomenology, every phenomenon or experience is always an appearance for someone. If we wish to understand how a psychedelic experience, mathematical model, social relations or a cultural product can appear as it is, and at the same time be understood, we have to include the subjective experience and the one it appears to. When investigating subjective accounts regarding objects or appearances which are being valued, rated, remembered or understood, is it important to keep the intentional form in mind. An experience or a phenomenon can be understood in different ways based on pragmatics or theoretically knowledge, which suggest that we have to consider the intentional to which the experiencer might be. It is the subject and more specific the physical subject, which gives perspective to how the experience would appear. According to Sartre, the body is located at every perception and in every project. It is our "point de vue" and "point de départ" (Sartre, 1943, p 391). Taking this into our consideration, we cannot first explore the body and then compare its relation to the world. The body does not functions as a filter between you and the world, but represents your primary relation and being. This means that subjectivity is anchored in our bodies, and in the same time our body and mind inflicts the way the world appears to us. So you could say that way the world appear to us is based on our body and mind's experiences.

Phenomenology helps us not only focus on the appearance as it is but also helps us investigate the subjective coherences, in order to understand the purpose of the appearance and how it can appear as it does. When investigating using a phenomenological approach, we reveal ourselves as the one to whom the object appears. Phenomenological analysis does not perceive the subject as it was from outside the world and does not ignore the world to the benefit of consciousness. On the contrary, phenomenology is interested in the subjective consciousness, as it is the field, from where the world appears and unfolds to one who experiences it.

By investigating phenomena, phenomenology withdraws from the normal clear distinction between epistemology and ontology because of its acceptance of the subjective phenomenon as a real experience of the subject. This acceptance of the subjective is also known as the lifeworld according to Husserl, which he described in his book "The Crisis of European Sciences and Transcendental Phenomenology", 1936. The lifeworld takes the user's experience and feelings into consideration, which supports our investigation of the psychedelic experience and how it affects the users and cultures. An example of the difference between natural sciences (numbers, graphs), and science (phenomenology) is that if both were asked to define water, natural sciences would answer H2O, while a science could explain it as liquid, clear, basic need etc. These two different answers leave us with two different ways to approach a certain subject or an experience in our case. Most science often claims objectivity and the importance of this, but objectivism is in reality something real independent of subjectivity because it is an offspring from the lifeworld. Social circumstances, relations and knowledge influences the way we interpret the world and how certain experiences influences our lives. (Collin, Køppe, 2002 p.136-137).

We have a great interest in subjective experiences as we focus on the psychedelic experience from a cultural and personal aspect and what influences it might have.

The psychedelic experience is subjective to the initiate and even though similarities appear, the effects and experience differ from users. To be able to understand the effects of

psychedelics and the experience, we have chosen to investigate trip reports from Erowid, one of the world's largest archives for information regarding harm reduction, drugs descriptions and effects. Looking at the psychedelic experience as a phenomenon enables us to withdraw from the physical limitation. After analyzing the user experiences and reports we will look into the American Author David Pinchbeck's own accounts in his book "Breaking open the head". The book includes Pinchbeck's own account of his psychedelic experience and how it has affected his life. It also includes detailed descriptions of his travels around the world for his research concerning the psychedelic experience. Through his travels, he interviews shamans, users and well-known figures in the psychedelic research scene, and at the same time, he tries certain psychedelics. We will use his cultural encounters, interviews and own experiences to find similarities and examples of the psychedelic experience and how it affects the user. Through analyzing their own accounts and experiences we want to see if we can find patterns or similarities to Timothy Leary's interpretation of the psychedelic experience, based on the Tibetan Book of Dead. We are aware and put into consideration that the cultural explorations and the experience are experienced and understood through Pinchbecks Western point of view.

### Qualitative method

We are using the qualitative methodology in our project, which covers different scientific research methods, used in humanities where it is difficult to measure or supervise a specific research area. This method does not look at the research area as an object but more as a subject or subjects. Since we are using phenomenology to research the psychedelic experience, this method supports the use of subjective accounts, which will enable us to gain a better understanding of the psychedelic experience itself. If humans define a situation as real, then they are in their consequences real (Thomas & Thomas, 1928). In our case with the psychedelic experience, is it very difficult to measure a subjective experience in numbers or graphs. Therefore, we use the qualitative method, so that it enables us to analyze the subjective experiences as a combination of phenomena in our search for the psychedelic experience and how it affects cultures and users. Our research is focusing on other people's

accounts and description, which we have tried to combine and compare through different trip reports and accounts.

# 2. What is a psychedelic?

Psychedelic is a category for certain drugs and plants that induce mind-altering, hallucinogenic effects. (Website 9,1998) The word Psychedelic originates from Greek, which means mind-manifesting and was first mentioned by the American psychiatrist Humphry Osmond. The word psychedelic is used to describe the state of consciousness typically experienced (Grof, 1975) under the use of hallucinogenic, non-addictive drugs such as Psilocybin mushrooms, LSD, DMT, Mescaline and Ayahuasca. Users of these drugs have reported the drugs to produce feelings of spiritual awakening, unifying feelings of connectedness to the universe and, in some cases, even contact with other beings (Website 10, 2012).

Common for psychedelics is that they are not addictive. Not only due to the many cases where they cause physical hardships, which we will describe later, but also because the human brain cannot develop a physical dependency on them as it can on other non-psychedelic substances (Website 14, 2016). Many of the psychedelics, which we have knowledge of, show a trend of being able to treat or even cure addictions (Website 15, 2014). The drugs defined as psychedelics have been used by different tribes and cultures to enhance their spiritual awareness and other mind-altering purposes. Even though psychedelics are known to have positive effects within different work fields such as medical treatment, solid research concerning psychedelics is lacking due to limitations by the war on drugs (Website 17, 2012).

# 2.1 Psychedelics and their history

This section aims to introduce different psychedelics in order to enable the reader to gain a better insight into the topic. This section consists of brief descriptions and short overviews of the history of different psychedelic substances. It is important to know what the main catalyzers for the psychedelic experience are and to have knowledge of the relevant plants and substances.

## Psilocybin "Magic" Mushrooms

Mushrooms are one of the widely and most commonly known used psychedelics, due to the fact that they grow on almost all continents. According to Dr Gastón Guzman, a Mexican mycologist and expert in Psilocybin mushrooms, there are more than 140 species of psychedelic mushrooms that contain the psychedelic chemicals, Psilocybin or Psilocin (Guzmán, G.; Allen, J.W.; Gartz, J. (2000).

After consuming such mushrooms, users describe a feeling of energy flowing through the body. This is often accompanied by a wide variety of perceptual changes such as; dilation, closed-eyed visuals, mental stimulation, feelings of insight and a quickly changing of emotions - often lots of laughter (Erowid 1, 2016). The mushroom trip lasts for 4-7 hours depending on the user and the amount consumed.

Psilocybin mushrooms have been used in many cultures for different rituals or healing ceremonies. The use of psychedelic mushrooms is traced back to some of the earliest civilizations on earth and archaeological evidence indicates that the fungus has been known for more than 10,000 years. Archaeologists have found rock paintings dating back to 7,000BC, made by indigenous cultures resembling, humans animals and mushrooms together and several objects resembling mushrooms have been located in Guatemala (Stamets, Paul. 1996). These findings can indicate that mushrooms played an important role in their society because they are beautifully carved and detailed.

## Lysergic Acid Diethylamide (LSD)

LSD is a classic psychedelic; one of the most commonly used and researched drugs in the world. Under controlled circumstances, carefully taken research's by psychologists proves that a small amount of the substance is enough for an abstract and aesthetic experience (Grof, 1975). People having experience with LSD tend to describe the substance as a psychological amplifier. Reports from users often describe enhanced colors and geometrical patterns. Many talk about a unifying connection to other humans and to the universe.

Albert Hoffman describes his LSD - trip: "... affected by a remarkable restlessness, combined with a slight dizziness. At home I lay down and sank into a not unpleasant intoxicated-like condition, characterized by an extremely stimulated imagination. In a dreamlike state, with eyes closed (I found the daylight to be unpleasantly glaring), I perceived an uninterrupted stream of fantastic pictures, extraordinary shapes with intense, kaleidoscopic play of colors. After about two hours this condition faded away..." (Hoffman, 1980, p.5).

Unlike the other psychedelics we describe, LSD is a man-made psychedelic and was first isolated and synthesized by the earlier quoted Swiss scientist Albert Hofmann in 1938 (Hoffman, 1980). Without knowing it, Hoffmann ended up having a huge influence on how the Western psychedelic culture evolved. In the beginning of the 1950's, researchers and scientists started to investigate the therapeutic benefits of LSD. LSD got widespread and known due to the Hippie movement and their intense consumption of the drug.

## Peyote - Mescaline

Peyote is consumed in a dried form and the part which contains the most of its primary active chemical, Mescaline, is in the flowering head of the cactus. Mescaline was first synthesized by Arthur Heffter in 1897. Mescaline is one of the most known psychedelic substances in North and Central America because it was used by The Native American Church and Central American tribes for various ceremonies and rituals. Mescaline had been a subject of different

studies and researches before it was banned (Erowid 3). Aldous Huxley wrote his book The Doors of Perception which is about his Mescaline trip in 1954. He describes everything that he has perceived, seen and felt with amazement:

"The change which actually took place in that world was in no sense revolutionary. Half an hour after swallowing the drug, I became aware of a slow dance of golden lights. A little later there were sumptuous red surfaces swelling and expanding from bright nodes of energy that vibrated with a continuously changing, patterned life. At another time the closing of my eyes revealed a complex of grey structures, within which pale bluish spheres kept emerging into intense solidity and, having emerged, would slide noiselessly upwards, out of sight. But at no time were there faces or forms of men or animals. I saw no landscapes, no enormous spaces, no magical growth and metamorphosis of buildings, nothing remotely like a drama or a parable. The other world to which Mescaline admitted me was not the world of visions; it existed out there, in what I could see with my eyes open. The great change was in the realm of objective fact. What had happened to my subjective universe was relatively unimportant" (Aldous Huxley, 1954, p. 4).

# N,N-Dimethyltryptamine (DMT)

Through the jungles of South America, tribes have been using psychedelic plants containing DMT for thousands of years. (Strassman, 2001)

DMT is a substance found in different plants, typically extracted from Prestonia Amazonica, a plant which mainly grows in The Amazonian Rainforest. Besides this plant, DMT can be found in at least 65 other plants and can be found in the human brain too (Strassman, 2001). Just like the other psychedelics we describe, DMT is not addictive and is known to be one of the most intense psychedelics. Some scientists and researchers also refer to DMT as the most common hallucinogen in nature and "The Spirit Molecule" (Strassman, 2001). It can be consumed in different ways, unlike the previous psychedelics. DMT can be snorted, injected, smoked or taken orally. Users often describe the DMT experience as getting "shot into the

universe" because of the intense immersive though short trip and the extreme visions following (Erowid User 4, 2016).

"The feeling of doing DMT is as though one had been struck by noetic lightning. The ordinary world is almost instantaneously replaced, not only a hallucination but a hallucination whose alien character is its utter alienness. Nothing in this world can prepare one for the impressions that fill your mind when you enter the DMT sensorium." (Website 25, 2012)\_

# Ayahuasca / Yagé (The Wine of the Soul)

Ayahuasca is a psychedelic brew made out of a mixture of plants often the Banisteriopsis caapi vine (MAOI)<sup>3</sup> and the Psychotria Viridis leaves (DMT) (Website 3, 2011). Different from DMT, the Ayahuasca trip usually lasts for 4-8 hours, depending on the mixture of plants, tolerance of the user and the amount consumed. Interviews and trip reports from all over the world reports significant differences in the experience and the effects due to the different mixtures of plants. In general, the Ayahuasca experience is defined as an oceanic feeling of connectivity to the universe and users often describe a sense of inner peace and acceptance of self, others and the world (Erowid 5). Another common experience for the Ayahuasca usage is a "purging" process which often consists of heavy vomiting and diarrhea but is often considered a positive effect and the fundamental part of the spiritual process. (Erowid 5). The plants are boiled and soaked until the brown liquid is finished and ready to be drunk. Ayahuasca has been used for shamanic rituals to cleanse the soul and the body. The first reports of DMT and Ayahuasca are from the 16th century when Spanish and Portuguese missionaries had their first encounter with Peruvians. Although these substances in one form or another have been used since 2130 BC until this day (DMT: The Spirit Molecule Explained).

<sup>2</sup> Quote from Terence McKenna an ethnobotanist and famous psychedelic researcher. (1946 - 2000)

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<sup>&</sup>lt;sup>3</sup>Monoamine oxidase inhibitor

### Tabermanthe Iboga (Ibogaine)

Tabermanthe Iboga is a shrub, with its roots containing Ibogaine and usually growing in Africa. Ibogaine is also found in the leaves and core, but the biggest concentration is in the root core. It is well known for its long-lasting psychedelic and therapeutic effects which for some users can last up to 24 hours. Users of *Iboga* report nausea, headache and vomiting. Though not yet accepted by medical science, it seems like a single dose of Iboga is able to stop or at least interrupt for a long period of time, an addict's craving for heroin, cocaine and alcohol. The existence of the therapeutic elements of Iboga are supported by the numerous clinics around the world offering Iboga treatments and masses of anecdotal material gathered from researchers, anthropologists and users (Erowid 6).

Some clinics claims to have treated over 3000 patients with Iboga (Website 4, 2016) and in the Netherlands, where the use of Iboga is legal, several clinics and private centers offer different forms of therapeutic treatments combined with the use of Iboga, such as meditation, psychotherapy and cures of different addictions or habits.

Iboga is not as famous as other psychedelics. However, it plays a central role during the initiation ceremonies of the Bwiti cults and was pronounced as "national treasure" in Gabon in 2000.

# 2.2 Cultural use of psychedelics

Evidence shows that indigenous tribes and civilization have been using different psychedelic substances for centuries. In this chapter we are giving a brief overview, mentioning a few tribes who used or still use psychedelic substances. Giving a basic insight in this chapter will lead to a better understanding of the analysis and discussion, where we look at the purpose and role of psychedelics.

On the central west coast of Africa, we find the Gabonese Republic, home of the forest-dwelling Bwiti practicing tribes of and a previous French Colony. Gabonese tribes and the local people have been practicing Bwiti closely related to it for hundreds of years (Fernandez, 1982). Bwiti is a spiritual discipline and one of the renowned religions in the Republic of Gabon, protected by the government's policy, that protects ancestral roots and religion, due to the intense development in Gabon. For the Bwiti practitioners, the root bark of the psychedelic plant *Tabernanthe Iboga* plays an important role in the practice of the religion and its rituals. The root bark has been consumed for hundreds of years during the initiation rites and the ceremony "rite of passage" and the experience reveals complex visions and insights. The visions are considered to be valuable not only for the one who is initiating, but for the entire tribe. The Iboga plant is said to promote radical spiritual growth, stabilize social structures and resolving pathological problems (Giorgio Samorini, 1997-98).

For the last past decades, Bwiti has evolved dramatically and modern Bwiti cults incorporate animism<sup>4</sup>, ancestor worship and Christianity into a belief system.

As in other cultures and societies around the world, the use of psychedelics combined with certain rituals and ceremonies is considered mind-altering and in this case, plays a central part for the "awakening process" of the Bwiti practitioners. "Iboga brings about the visual, tactile, and auditory certainty of the irrefutable existence of the beyond. The plant-spirit directly reveals that the human soul is a "spiritually immutable substance." Through the initiation, the Baanzi discovers that man exists on two planes of existence at once - the material plane and the spiritual one. "Physical death loses all meaning because it is nothing but a new life, another existence." (Goutarel in: Breaking the open the head, p. 34)

<sup>&</sup>lt;sup>4</sup> the belief that all natural things have spirits and can influence human events. Cambridge Dictionaryhttp://dictionary.cambridge.org/es/diccionario/ingles/animism

Another example of how psychedelics are present in different cultures is the "Huichol" or Wixaritari as they call themselves. They are native Mexicans, who live in the Midwest of Mexico in the Sierra Madre Mountains. This tribe focuses their ancient traditions on Peyote. They are one of the only tribes in North America to still have their ancient traditions (Website 12). The 'Huichol' are shamans and healers by tradition and this is passed on generation to generation. Their lifestyles are based on a close relationship with nature, which in effect leaves them independent of electricity and running water. In their culture, Peyote is elevated to the status of a god, a god that gives answers, fertility and prosperity. There is no certain answer to how they started using Peyote or how they originally found it. To obtain the Peyote they must pilgrimage for at least 40 days to a desert which they call Wirikuta (Website 13, 2016). This pilgrimage consists of 3 kinds of people within the tribe with strong spiritual leadership; they are called *marakames* and *kaiwateros* 

After the ceremonies, people can finally become shamans, healers, singers or artists. The Huichol tribe is very well known for their psychedelic art which is considered a great gift among the tribe. Their art is inspired by their visions during the Peyote trips, and are often esoteric, mythological and symbolic representations, full of history and legends about their cosmogony.

South of Mexico in the Amazonian jungle, where we find the remains of the great Aztec civilization. The Aztecs are one of the most well-documented civilizations in Mesoamerica when it comes to the use of psychedelic drugs, with many references in their history which indicates the huge role psychedelics played in their culture. We know that they at least used 5 different psychoactive and psychedelic plants due the Florentine Codex was written in the 16<sup>th</sup> century, by the Franciscan friar, Bernardino de Sahagún (11<sup>th</sup> book; Earthly things). In the Northwestern part of Argentina, archaeologist found smoking and snuffing devices, some of them dating back to 2130 B.C with residues tested positive for a high dosage DMT only obtainable from high usage (Torres, 1995, p 312-314). Several old artefacts have been recovered from different burial sites and ruins which all seems to be tools related to the ceremony of snuffing. Beautifully carved mortars, bone tubes, spoons and snuff trays have

been found. Some of these tools are decorated with different images depicting half humans half birds or a face with mucus running from the nostrils and eyes wide open, which could resemble the reaction of the sniffing. Some graves have been located containing hundreds of pipes and tubes (Ogalde, Arriaza, & Soto, 2009).

The beautiful carvings and the various amounts of different tools recovered could indicate the importance of DMT in their culture, as undoubtedly many hours were spent on creating these relevant tools and artefacts indicate. Another example of the role and influence the psychedelics had on the Aztec civilization, is the famous representation of the god Xochipilli (1450-1500 CE). A masterpiece of Aztec sculpture now is residing in the National Museum of Anthropology in Mexico City. The statue is 1.2 meters high and has Xochipilli seated on a temple platform which is decorated with psychedelic plants, such as the Psilocybin mushroom and different psychoactive flowers. Xochipilli is wearing a mask and is himself covered in flowers from psychedelic and psychoactive plants and animal skins. Cross-legged and carefree the god is portrayed happily singing and playing his rattles, a vibrant symbol of all the good things in life.

Peyote or ``satanic trickery`` - as it was called by Spanish conquerors — played an important sacramental role in tribal use in North America and it has persisted through tribal ceremonies for the past 5000 years. Native Americans perceived the world as filled with spiritual and supernatural power that reaches people through dreams or psychedelic experiences where plants, animals or natural phenomena have an important and sacred role. Besides the shaman, this supernatural power itself can be a leader, who gives ritual instructions to the one who is having the experience. Each shaman is a teacher who gives instructions and leads the receiver towards using the given power for good purposes. Anyone who uses the power given in a destructive manner is considered to be a witch. Today`s Apaches claim that this power can only be obtained through direct contact with Peyote flowers.

Switching to an important period in the psychedelic drug history in Western society, we will look at the 1960s. A period where the accessibility and popularity of drugs' (mainly LSD) encouraged the creation of a separate counterculture is the hippie movement. The movement started in the United States and it mainly involved young people around the age of 25. Most of the hippies used psychedelics for spiritual experiences, to expand their consciousness. They were interested in self-exploration and believed that psychedelics would help them perceive their existence in a new and different way. They sought the feeling of oneness and believed that it was a tool for spiritual growth, which also encouraged them to explore new religious paths, especially Eastern religions such Buddhism and Hinduism. The ideology of hippie movement is altruistic ideas such peace, love, freedom, anti-war, and nonviolence. They were against values that were dictated by the government, such as capitalism, nationalism, and against the strict rule of eight-to-five working days. They wanted to create an alternative society that dismissed war, power, materialism, greediness, selfishness and would believe in altruistic ideas, which were inspired by the experiences caused by psychedelic substances (Paul Oliver, 2014).

Standing as a clear contrast to the cultural use of psychedelics, we have the current Western society. In Western society alcohol and tobacco is main cultural substances consumed. Behind the consumption of these substances lie entirely different reasons than that of spiritual development. Alcohol and tobacco are subject to consumption with the purpose of enjoyment or de-stressing. Ancient tribes and older societies had a greater purpose for the consumption of psychedelics and the ingestion of them was even sacred. Nowadays the consumption of psychedelics is illegal in most countries in the world and is considered a dangerous and negative activity, which tends to be performed at parties or festivals, and is considered to be able to easily lead to addiction.

# 3. What is the Psychedelic Experience?

The psychedelic experience is a concept used to describe the mind-altering states. Given that it does not have a universal definition, many scientists and researchers have their own personal understanding of what is a psychedelic experience. For example, Timothy Leary defines it as "a journey to new realms of consciousness" (Leary, 1964, p.4). Alan Watts defines it as the transformation of consciousness described in Taoism (Alan Watts, 1962) and Stanislav Grof defines it as a revelatory insight into existence (Stanislav Grof, Hal Zina Bennett, 1992). However, almost all definitions perceive the psychedelic experience as an altered state of mind that helps the human being in acquiring a higher level of consciousness.

In order to have such an experience, it is often required to ingest any kind of psychedelic substances. There is also evidence that psychedelic experience can occur without any substances in cases such as a very high body temperature, hypnosis, holotropic breathing and others.

The psychedelic experience is characterized as a transcendental state compared to a sober way of thinking. We can validate the psychedelic experience as subjective and we differentiate the experience in different phenomena such as physical, visual, perception of time and space, emotional, auditory and cognitive. Thanks to these phenomena we can acquire and go through the general experience which can lead you towards different paths. However, all the phenomena mentioned often lead to one of the most important part of the psychedelic experience - the long-term cognitive changes. In the following sections, we are going to explain more deeply the changes which occur during the experience and, especially, the long-term cognitive changes through Timothy Leary's account and also first-hand user reports.

# 3.1 Timothy Leary's account

Timothy Leary was an American psychologist and a campaigner for the research of psychedelic drugs. He is known for the research project called Harvard Psilocybin Project,

which conducted in cooperation with Richard Alpert (also known as Ram Dass). It was an experiment in which they analyzed the effect of Psilocybin primarily on prisoners and later moved on to students (something that was legal at that time) (Website 7, 2016). This research led to the Concord Prison Experiment, which focused on the rehabilitation of prisoners, using Psilocybin and psychotherapy combined (Website 8, 1998). Given that Timothy Leary is such a big figure in the research of psychedelic drugs, we decided to use his accounts as a part of the basis of our project and, in particular, his book *Psychedelic Experience: a Manual Based on the Tibetan Book of Dead* written in 1964. Leary's interest in Buddhism is elucidated in that book, given that he relates the psychedelic experience to this specific religion. The book was coauthored by Ralph Metzner and Richard Alpert and is based on the campaign for the research of psychedelic drugs such as LSD, Psilocybin, and Mescaline.

In this book, Leary mentions that the psychedelic experience can be divided into 3 steps: the first step — *Chikhai Bardo*, the second step — *Chonyid Bardo* and the third step — *Sidpa Bardo*. He also mentions that the experience is more likely to be successful if the individual has a guide, whose role is to refresh the memory of the subject and free his mind from the ego. In this context, the subject shouldn't end up being the same person that he was before the experience. The gates to the subconscious world closed for people because it's too complex. In this context, Leary believes that psychedelics provide "the key to this forgotten realm of awareness" (Leary, 1964, p.).

## The first Bardo (Chikhai Bardo)

The first Bardo is characterized by a conditioned state of mind and a deep meditation. The most important phenomenon of this step is the redemption of consciousness from the personal ego, what Leary calls the conscious expansion process. This concept means the capacity of awareness to expand "beyond everything you have learned, beyond your notions of space and time, beyond the differences which usually separate people from each other and from the world around them." (Leary, 1964, p.). This process is also confused with

schizophrenia and, therefore, people started to think that psychedelic substances are dangerous.

In this step people may experience:

- some common *physical sensations* such as coldness, pressure on the head and ears or even on the entire body; body disintegration and melting; tingling in the fingers; trembling and sometimes nausea (however, the author states that *the symptoms are mental* and the individual should just enjoy them).
- a strong flow of energy inside the body and around it. The subject feels as a part of an energy field and can sense a movement in the backbone. The best thing to do in this situation, according to Leary, is to let the energy flow through the body.

In this Bardo, the person is also able to see the Clear Light, which "induces an ecstatic condition of consciousness such as saints and mystics of the West have been called illumination" (Leary, 1964, p.13). The subject should stick to this vision because it can free the mind from the ego. This phenomenon may also be described as the death experience because it is "the reverse of the birth process" (Leary, 1964, p.).

According to Leary, if people accept the process of conscious expansion or ego release, they enter the second Bardo. However, when the subject is not ready for this process, he enters the third Bardo or experiences wrathful visions.

# The second Bardo (Chonyid Bardo)

The second Bardo is described by intense hallucinations, which Leary categorizes in the following 7 types:

1. The first type of visions occurs with the eyes closed and it represents *the Clear Light* (from the first step) which "may be interpreted as God the Creator" (Leary, 1964, p.19). This is for

many trips a central vision and often during the visions different divine or heroic figures will appear, all in some way connected to a deity.

- 2. The second type of visions occurs also with the eyes closed and it involves the intellectual aspects of the individual. One may experience being in the middle of "an endless flow of colored forms, microbiological shapes, cellular acrobatics and capillary whirling" (Leary, 1964, p.20). The author compares these visions with the cellular and sub-cellular processes.
- 3. The third type of hallucinations involves the emotional aspects of the individual, who experiences an intense flow of emotions through the entire body. The author mentions that "dominating this ecstatic state is the feeling of intense love" (Leary, 1964, p.22).
- 4. The fourth category of visions occurs with the eyes open and involves intellectual aspects. The subject may feel that his mind isn't functioning anymore and is "struck with the sudden revelation that all sensation and perception are based on wave vibrations" (Leary, 1964, p.23).
- 5. The fifth vision involves the emotional aspects of the subject and is described by a feeling of unity with the world and with the surrounding objects. The individual also "can sense another's feeling and mood directly, as if they were his own" (Leary, 1964, p.25).
- 6. The sixth type of hallucinations is represented by an intense feeling that everything is possible. It involves the psychological background of the subject, who experiences a metonymy of senses: "symbols change into things symbolized and vice versa; words become things, thoughts are music, music is smelled, sounds are touched" (Leary, 1964, p.26).
- 7. The last category of visions depends on the cultural background of the individual, who is able to see "heroes, heroines, celestial warriors, male and female demi-gods, angels, fairies" (Leary, 1964, p.27). These figures are "embodiments of aspects of the person's own psyche" (Leary, 1964, p.27) and often represent the idols of the subject.

During the second step, the individual may also experience nightmare visions, which are the adverse effects of *the conscious-expansion process*. The author states that these hallucinations "represent the attempts of the intellect to maintain its threatened boundaries" (Leary, 1964, p.28).

# The third Bardo (Sidpa Bardo)

The last, third Bardo is the period when the subject unconsciously struggles to return to reality. In most cases, more than a half of the psychedelic experience is represented by this phase. This step may also be described as a reversion of the conscious-expansion process. However, this step occurs only to people who couldn't realize that the visions from the second Bardo were just projections of the mind, and became influenced by them.

Leary gives some examples of the signs of the Sidpa Bardo in his book:

- *One sign* is when the subject has supernatural abilities such as telepathy or future prediction. However, these phenomena are not scientifically proven.
- Another sign is the panic and the experience of nightmare visions from the Chonyid Bardo.
- The third sign is when the subject feels restless and has a constant desire to move. Because of the unhappy state of mind, the individual may have a desperate need to call family or friends and ask for help.
- *The fourth sign* is when the subject feels "stupid and full of incoherent thoughts, whereas everyone else seems to be perfectly knowing and wise" (Leary, 1964, p.32).
- Another recognizing sign is represented by a feeling of being separated from reality. The subject may think that there is no way back to reality.

- The sixth feature is the sensation of being squeezed and oppressed by the surroundings. The last sign is when the individual sees everything in a twilight, completely different from the previous stages of the psychedelic trip.

The author mentions that the connection to the material aspects of life will only make the return to reality more difficult and tremendous: "this will affect the psychological balance in such a way that even if destined to return at a higher level, you will actually re-enter on a lower level in the world of unsatisfied spirits (neurosis)".(Leary, 1964, p.33) In this context, the subject should maintain *the conscious-expansion process* as much as possible.

### Set and Setting

The terms "set" and "setting" were first mentioned by Timothy Leary in his book, "The Psychedelic Experience", and represented the initial conditions, which determine the trip's characteristics. "Set" is explained as the human state of mind before starting the psychedelic trip, the mood and the psychological background. "Setting" is represented by the environment where the trip takes place, the comfort and, in some cases, the people who surround the person going through a psychedelic experience. Leary states that "...the drug dose does not produce the transcendent experience. It merely acts as a chemical key — it opens the mind, frees the nervous system of its ordinary patterns and structures. The nature of the experience depends almost entirely on set and setting" (Leary, 1964, p.4), which denotes that both parameters have a strong influence on the visions that appear during the trip.

Leary classifies the set into the long-range set and the immediate set. The long-range set refers to the personality, cultural and psychological background of the one experiencing psychedelics: "the kind of person you are – your fears, desires, conflicts, guilt, secret passions - determines how you interpret and manage any situation you enter, including a psychedelic session "[...]the reflex mechanisms used when dealing with anxiety - the defenses, the protective maneuvers typically employed." (Leary, 1964, p.40). Immediate set refers to how prepared the person is for the psychedelic experience. The individual should have positive thoughts towards the upcoming experience; fears and insecurities lead to unpleasant

experiences: "Session preparation is of critical importance in determining how the experience unfolds. People tend naturally to impose their personal and social game perspectives on any new situation. Careful thought should precede the session to prevent narrow sets being imposed." (Leary, 1964, p.40).

Timothy Leary mentions the ideal state of mind to take up a psychedelic experience and lose the sense of having an ego: "Flexibility, basic trust, religious faith, human openness, courage, interpersonal warmth, creativity, are characteristics which allow for fun and easy learning. [...] Most important is insight. No matter how many cracks in the record, the person who has some understanding of his own recording machinery, who can recognize when he is not functioning as he would wish, is better able to adapt to any challenge – even the sudden collapse of his ego." (Leary, 1964, p.40). He also describes the bad characteristics, which lead to a bad trip: "Rigidity, desire to control, distrust, cynicism, narrowness, cowardice, coldness, are characteristics which make any new situation threatening." (Leary, 1964, p.40). To have the ideal setting " the voyager should make sure that he will not be disturbed by visitors or telephone calls, since these will often jar him into hallucinatory activity. Trust in the surroundings and privacy are necessary." (Leary, 1964, p.41).

If one experiences unpleasant side-effects, the main principle in this case is not to panic and to remember that soon everything will come to an end.

# 3.2 The Phenomenological account of the Psychedelic Experience

In this chapter we are creating our own account of the psychedelic experience partly based on subjective user reports. The main stages and areas will be the physical effects, visual experience, auditory experience, cognitive changes, distortion of time and space as well as the possible long-term effects. Thus giving us a fundamental and important understanding of the core elements and crucial details of the psychedelic experience, which is essential for one to understand and to be able to explain the impact it has had on humans throughout history.

## Physical effects

There's a big variation in the experiences induced by consuming psychedelics, partly dependent on the dosage and type of psychedelic, but there's also a general theme of experiences shared between the substances.

The physical effects of psychedelics are very common among users. They are the body's reaction to the psychedelic substance. These effects usually pass and break through into a more psychological phase.

Based on Timothy Leary, most of these physical changes are only mental states and no physical changes are happening; only our perception has changed. Although we have not researched this from a scientific perspective and that is why we do not go in depth here. In our view, physical changes such as increased body temperature or higher heartbeat can be, as Leary says mental, because subjects on psychedelics have more sensitive senses and perception, but we argue that physical effects such as vomiting, having a headache or appetite loss are mental states.

The short-term physical effects usually shared by all of the substances are the following:

Increased body temperature, which includes sweating and/or chills.

As individuals on Psilocybin describes it:

"My fingers and toes were warm and felt like they were glowing with heat, while my limbs seemed to throb as well. My breathing seemed to alter, and I became conscious of a kind of hyperventilation taking place. It was not threatening, and could be modulated through gentle application of willpower, but I felt well oxygenated, so I let it progress as it seemed to wish. There were rapid short breaths whose frequency ramped up gradually." (Erowid user 5, 2007)

Or "In the shade it's too cold, in the sun it's too hot. We go inside." (Erowid user 6, 2011)

• Increased heart rate and blood pressure.

On DMT: "I felt an intense and quick pulse in my right arm and had to check the pulse on my neck to make sure. Slow and steady. Momo noticed me checking and confirmed the same feel of twitching and pulsing." (Erowid user 7, 2016)

- Dilated pupils.
- Appetite loss, sleeplessness, headaches and nausea. Nausea, headaches and appetite loss are usually not signs of a bad trip and they occur before an intense trip. Vomiting for example is a normal part of drinking Ayahuasca, after which the subject feels "cleansed" (Pinchbeck, 2002, p. 142).

However, other psychedelics can also generate these physical effects. In another Erowid report, in which the subject takes LSD: During the trip "while thinking she had to vomit every minute or so, or suddenly running to the toilet..."

Although physical effects occur often, the most essential and significant experiences are those of mental nature. These experiences are primarily what user's tend to seek when consuming psychedelics and can be rich in philosophical knowledge and spiritual development. In the following sections we are going to focus on the mental changes.

## Visual changes

As a part of visual changes, objects and colors can seem more vivid or duller, closer or further, bigger or smaller. They can start swirling, moving, might become transformed, distorted. Geometry and patterns may appear and we can become more attentive to objects (DMT, the spirit molecule, 2001). For some people these new experiences may have positive or negative effects.

Since the visual experience is out of the ordinary, quite unusual and distinctive from daily eyesight, it might be problematic to name the feeling and accurately describe the experience: "…I was surprised at my impotence in describing them…" (Sinnett. 1971, p.32).

There's also a specific attention to the details. Objects of the ordinary and that which one has seen many times before, can suddenly attract stronger attention than usual and appear different. For example, E. Sinnett described his experience of a poorly made painting that he had seen and passed many times before, that suddenly attracted his attention and appeared different and more interesting to him.

Things may become beautiful, colors become brighter, more vivid, and intense, (The psychedelic explorer's guide, 2011). Objects can start moving "A painting on the wall began to move. The horses in the picture were stamping..." (Krippner, 1971, p. 36-37), they might begin to quiver and shimmer. Objects may come to a constant movement stage. They might also transform: "The alarm clock was a work of art form a Cellini studio" (Osmond, 1971, p.36). Objects may also lose their shape, become distorted or curved. One of the users on LSD shares his experience of strong visual changes "The colors of the room grew deeper. Alien-like figures danced amongst the lattice curtains on the wall. The deep red table curtain behind him was now deep purple with a golden feather trim, and moved as though blown forward by the slow and powerful breath of a great spirit." (Erowid user 9, 2013)

Another strong visionary change appears as geometrical and abstract shapes and patterns that are constantly changing, as one of the users experienced it on LSD "I had strong inner hallucinations at this point, which were a show of colors, shapes, geometric structures, and these small ethereal mechanized shadow-like figures all superimposed on the cornfield in front of me." (Erowid user 9, 2013)

Those patterns, vivid colorful backgrounds also appear when eyes are shut and it might become enjoyable or frustrating, because when the body and mind become exhausted and the person feels like resting, hallucinations might not allow them "I felt them to be intrusive. Neither sleep or rest was possible..." (Sinnett, 1971, p. 32).

Surroundings might seem different and image might lag behind as experience described of a street that was driven through as a tunnel and the space around him was blurry "as they are when one passes something very near at high speed" (Osmond, 1971, p. 33).

#### Perception of time and space

One of the most prominent and noticeable aspects of a psychedelic trip is the distorted perception of time and space. It is very frequently manifesting throughout the entire experience. This phenomenon often described as a 'slowing down' of time (Alan Watts, 1962). The person can experience a short period of time as hours, months or years, however, the opposite can also be perceived. Time can also be fully stopped, as another user explains his time distortion on mushrooms "There was no time, it came to a stop. Time was not a factor, there was no aging, growing old or any human emotions that are attached with these troubles. Everything was one and I was everything." (Erowid user 10, 2013). Furthermore, besides the quantitative alteration of the perception of time, there is another significant and often recurrent aspect, when time changes as a dimension. Past, present and future can collapse in one. These kinds of experiences can lead to reliving past memories. This happening was scientifically proven to be beneficial in a therapeutic use (Stanislav Grof, 1975). Space can very often appear as vertically and horizontally compressed, distances can seem longer or shorter (Psychedelics, the use and implication of hallucinogenic drugs, 1971) and the size of objects can defer from the actual one.

## **Emotional changes**

Users report experiencing high euphoric sensations, feelings of happiness, laughter, but mild to extreme feelings of anxiety are also commonly reported experiences during the 'trips' (Psychedelics, the use and implication of hallucinogenic drugs, 1971). Feelings of happiness can maximize as a user experienced when trying Ayahuasca "I'm laying on the purest ecstasy I have ever experienced. It becomes so much that I again feel like crying out of pure joy and ecstasy. Tears roll down my cheeks" (Website 5, 2016)

The feelings of anxiety most often pass by as the user relaxes and lets the overwhelming feelings and experiences happen. Sometimes while using substances like DMT all emotions can surface "The closest I can come to describing it is a combination of anxiousness, regret, hope, love, confusion, completion, and so many other emotions, but not a combination of Earthly language for emotions could properly, or even come close to describe what it really was" (Erowid user 11, 2010). Adding to this, the experience can be spiritually uplifting, also giving the user a strong flow of creative energy. These effects also tend to create a strong sense of wonder and awe in the experience of the user (Website 6, 2016).

# **Auditory effects**

Just as other senses, our perception of sounds and voices changes after taking psychedelics. In his book, Leary mentions that there are some internal sound effects produced either by the auditory apparatus or by the auditory cortex and described as "clicking, thudding, clashing, soughing, ringing, tapping, moaning, shrill whistles" (Leary, 1964, p.20). It is not excluded that these sounds may be mentally imposed.

Another account is made by Ben Goertzel, who describes his sensations while listening to a song during a trip on LSD: "The final song arrived: the title song, Axis, Bold as Love. I dove through the music. The onset of the song is slow, sweet, strong; as smooth as the pearly void of the Zen Buddhists ... the music flowed along slopes of invisible angel-down which tickled the cracks in my chapped lips, which made me sing silently and laugh, while the lyrics told fantasies of bright spiraling colors." (Website 16, 1996). It this case, a change of senses is experienced, this phenomenon being described also by Leary "thoughts are music, music is smelled, sounds are touched" (Leary, 1964, p. 26).

One more example of auditory effects is given by Peter Stafford<sup>5</sup>, who gives the account of J.S. Slotkin first Peyote experience in his book: "the singing wavered from high to low pitch in a way that no singer could ever do. Then the song seemed to come from all over the tipi,

<sup>&</sup>lt;sup>5</sup> 1939-2007, American writer who experimented with Peyote

rather than just from the singer, and for a while it seemed to come from the top of the tipi." (Stafford, 1992, p.146). When asked to describe the auditory effects of the psychedelic trip, a user reported: "Then I heard remarkable sonic distortions - something not unlike Shepard tones, but with crazy, irregular fluctuations in rhythm." (Erowid User 4, 2016).

### Cognitive changes

Cognitive changes take an important part in the psychedelic experience. The experiences can be divided into two different categories, short-term and long-term. The short-term cognitive changes happen while under the influence of psychedelics and remains only within that period of time. On the other hand, long-term cognitive changes tend to be revelations or insights experienced during the trip, which remain also after the trip has ended. These cognitive changes can have a big influence on the user's mind, such as a change in their way of thinking, and can be life changing.

A short-term cognitive change is of a different nature. An example is given by a user after consuming DMT. The user described a temporary experience of himself transforming into his friend who was with him during the trip. "When I see him I get the feeling that I am viewing a mirror... My exact thoughts were, "I'm cool, that's Boob right there. That's Boob? I'm Boob! I'm Boob? I'm not Boob. Have I been Boob this whole time? and all of a sudden I am someone else." (Erowid user 14).

An example of long-term experience given by Ben Goertzel, whose wife had an experience of deep insight, that lasted several months after taking LSD. The experience is described as seeing "the unimportance of daily concerns or what one does, and how everything was beautiful and wonderful" (Website 16, 1996). He also mentions that after this experience his wife became a Zen Buddhist, convinced that meditation is the way to achieve this state of spiritual happiness. Another example, of long-term cognitive change is when D. Pinchbeck had a trip on mushrooms. He says that the mushroom helped him face problems of which he had no prior knowledge of "...but the bits of dried fungi made me aware, for the first time, of exactly of what I was doing wrong" (Pinchbeck, 2002, p.61).

Ram Dass in his book "Be here now, 1971" states that the use of psychedelics was not just about using the drugs and getting high, but it was more about a change within yourself, a change that altered the way you see the world and the way you think of yourself.

Alan Watts categorized several cognitive experiences, or in other words 'philosophical realizations' in his book 'The Joyous Cosmology, 1962'. One of the categorizations or realizations Watts describes is; "Awareness of the polarity" He states: "This is the vivid realization that states, things and even that we ordinarily call opposites are interdependent, like back and front or the poles of a magnet". In other words, things that normally appear to be complete opposites are in reality two sides of the same coin (Watts, 1962, p. 101). Another realization Watts describe is "awareness of relativity". This is the realization that all life, all that exists, is different expressions of the same thing. Watts states: "I see that I am a link in an infinite hierarchy of processes and beings, ranging from molecules through bacteria and insects to human beings – a hierarchy in which every level is in effect the same situation" (Watts, 1962, p. 103). He then concludes by saying: "From this, it is but a short step to the realization that all forms of life and being are simply variations on a single theme: we are all in fact one being doing the same thing in as many different ways as possible. As the retina enables us to see the countless pulses of energy as light, the mystical experience shows us the innumerable individuals as a single Self "(Watts, 1962, p. 103). Such realizations are likely to form a new way of interpreting the world and, if put into action, could lead to permanent change in one's behavior.

A separate example is that of Ben Goertzel<sup>6</sup> who mentioned in his book that "to someone who has had a deep psychedelic experience, the world can never appear as solid, rigid, and fragmented as it did before." (Website 16, 1996). It happens due to experiencing a state of mindfulness, because, as Goertzel suggests, psychedelic substances "stimulate the hierarchical network, thus leading to general spreading activation; they initiate the breaking-free of mental pattern/processes" (Website 16, 1996).

<sup>&</sup>lt;sup>6</sup> Goertzel is an artificial intelligence researcher, specialist in the field of computer science, mathematics, bioinformatics

An individual example supports the previous theories: "I asked myself 'why do I take these drugs?' This was not a 'bad trip' type issue here. It was more a matter of curiosity to me, seeing that the issue of drugs is such a contentious one in society. So what thing about me is different, or means that I am interested in changing (temporarily) the way it feels to be? Of course encapsulated in this issue was my long-term weed smoking habit. There are aspects of my personality which do not satisfy me and seem to account for some of the disappointments I have come across along the way. I was frantically trying to trace the line of past indiscretions back to some point or other, which might have triggered or initiated the patterns of behaviour I was dwelling on. This can be quite tricky when your memory is full of holes, and you are labouring under the auspices of a psychedelic drug." (Erowid user 12, 2007).

### 3.3 The risk of a bad trip

A psychedelic crisis, commonly called a bad trip, is the experience which involves negative emotions such as anxiety, panic, paranoia, anger and others. It also involves intense, sometimes terrifying hallucinations or loss of perception of reality. Even if the individual is an experienced user, there is always a probability of delusions occurring during the experience (Leary, 1964).

Tibetans assign the horrifying visions to the Brain Chakra and believe it is a reaction of the mind to the process of consciousness expansion (Leary, 1964). A user of DMT reports his mind-expansion experience that took a negative turn: "I decided to accept that I was dying, or dead, or in some ways, had already been dead for quite some time. Part of me felt as though I had just woken up, that this was the real truth of the nature of existence, that my life prior to this point had been spent in preparation, that I had been unaware. Waves of compassion and fear began to flow through me." (Erowid user 13, 2011). Timothy Leary also mentions a state like that in his book, when the subject experiences "the feeling of being dead, cut off from surrounding life, and full of misery." (Leary, 1964, p.32).

A psychedelic crisis may also be provoked by the psychological background of the subject or by some previous actions, which represent set and setting. An example is given by a user of LSD: "A few weeks before, I read George Orwell's novel '1984' [...]The anti-hero in Orwell's novel was captured by the thought-police and tortured in the Ministry of Love, in room 101. In this room the prisoners are faced with their inner worst fear. [...]Now I was in room 101. I did not know my greatest fear, but there it was. It filled me out, each part of my body and every angle of my thoughts. No escape. There is no God.". (Erowid user 8, 2016) As we can see, reading George Orwell's novel earlier led to some wrathful visions during the experience.

Another interesting case is reported by a psychedelic user and is about his girlfriend. Due to having "some issues in her past that she did not want to deal with at the time", she had a psychedelic crisis. However, he also mentions that "most likely, she was prone to this sort of psychosis [...] the LSD definitely sort of opened the door.". Even if it was a bad experience, he views it positively and finds a meaning in it: "I view this experience as a sort of transformation of her life into a better person." (Erowid user 2, 2016).

Sometimes, due to a bad psychedelic experience, people decide to call an ambulance. However, Stanislav Grof - a psychiatrist who specialized in researching non-ordinary states of human consciousness - states that transferring someone to a psychiatric facility, especially if it involves an ambulance, creates an atmosphere of danger that might contribute additionally to the trauma created by the psychedelic state and the painful emotional crisis (Website 23, 1994). The psychedelic user mentioned in the latter paragraph also reports that a person going through a psychedelic crisis should be isolated in a quiet, dimly lit room, without the coming and going of strangers, which is quite the opposite of transferring someone to a hospital or calling the ambulance.

Generally, bad trips aren't really common among psychedelic experiences. That is also implied by an LSD user who went through it: "the following account is an example of one very bad trip in around 30 good ones" (Erowid user 16, 2003).

# 4. Analysis

In this chapter, we are focusing on analyzing the psychedelic experience from a more indepth cultural perspective. We are going to use Timothy Leary's definition of the psychedelic experience in addition to phenomenological accounts, in order to find similarities and coherence between the subjective experiences. We are using the American author Daniel Pinchbeck's book, "Breaking open the head", to look at the role the psychedelic experience plays in different cultures, experienced from his Western point of view. In the book, Pinchbeck describes cultures all across the globe throughout his many years of travelling and his many different encounters with psychedelics and the psychedelic experience. Most of these cultures have been using psychedelics for various purposes for centuries, which we will also analyze in this chapter.

## 4.1 Bwiti - The Rite of Passage

Pinchbeck visited Gabon in the 1990's to research the Iboga phenomenon and to participate in an Iboga ceremony in a small village, guided by a shaman.

For the Bwiti, Iboga plays a central role in their initiation ritual, as mentioned earlier in the cultural accounts. Dan Lieberman, an ethnographer and photographer who had a huge interest in the Bwiti and the use of Iboga told Pinchbeck: "The Bwiti believe that before an initiation, the neophyte is nothing. It is only through undergoing the initiation ceremony that he becomes a Baanzi, one who knows the other world, because he has seen it with his own eyes" (Pinchbeck, 2002, p.9).

This quotation is a good place to start, in order to understand the importance of the use of *Iboga*, hence the psychedelic experience for the Bwiti practitioners.

As in other cultures and societies around the world, the use of psychedelics combined with certain rituals and ceremonies is considered mind-altering and in this case plays a central role in the "awakening process" of the Bwiti practitioners. The role of the process in the Bwiti tribe is considered a cognitive change, since the Bwitis perception of the world undergoes a radical change through the Ibogaine trip. Through the different phenomenological accounts of the psychedelic experience, evidence indicates, that for the Bwiti, the spiritual dimension plays an important role, as well as the physical. For them, the cognitive changes that occur are beyond what can happen physically and play a highly important part of the identity of a Bwiti practitioner.

Pinchbeck starts by describing the Bwiti tribe as something that everyone can join. "Why would the Bwiti allow me to join the sect? -... Bwiti is like Buddhism... anyone can join if they are willing to be initiated" (Pinchbeck, 2002 p. 11). The Bwiti tribe accepts anyone who is willing to expand his consciousness in order to reach the spiritual world.

The cognitive changes that occurred for Daniel Pinchbeck, are pointed out in his book Breaking open the head. These changes started to happen after his initiation in the Bwiti tribe. Even though Pinchbeck's faith in life was already distorted, due to him being in a mentally challenging place, he was willing to join the tribe. He trusted the tribe and believed that they could help him make a radical change in the way he had been thinking. He described his life as meaningless or, in some way, looking for something else, something deeper that he had not yet reached.

For Timothy Leary there is always the "Set". This can be one's psychological background: "...I was losing interest in myself. Or I was like an actor who had lost the motivation for his part... I fell into spiritual crisis..." (Pinchbeck, 2002, p.14). In this case it is elucidated how Pinchbeck had a sense of being lost in his "set". He was trying to find a different direction for his life. The set is very important part of the psychedelic use, because it can determine whether you are going to have a full psychedelic experience or not. He describes his immediate set as positive toward the psychedelic experience. He was ready to turn around and leave all his insecurities behind. The long-rage set of Pinchbeck appears as how he was and how his Western vision of the world was.

"...I spent so much time contemplating the meaninglessness of existence that I sometimes felt like a ghost. Perhaps I am already dead..." (Pinchbeck, 2002, p.14) - the quote implies that for Daniel Pinchbeck cognitive changes took place. It is most visible in his way of thinking prior to the initiation of the Bwiti tribe, which was a sensation of despair and lost in the Western world. As it is implied by Leary, the set and setting have a high importance. In the case of Pinchbeck, even though it was not the set and setting that was right before the psychedelic experience with Iboga, it could have been that his long set was when he had lived in the United States.

Another set could be when Pinchbeck arrives to the King's village in Africa. There he is introduced to the leader of the Bwiti, the encounter before the initiation with him was not pleasant at all, it made him feel unsafe and did not trust the procedure with the trust it was needed to have. Just before the ritual began the atmosphere was reduced to an insecure atmosphere which Leary describes as a direct aggression for the psychedelic experience because in this type of experiences the user has to be in a place where they feel safe, where they can manifest as the trip should go: "We did not feel safe; later on, the analyst told me she had never been so terrified in her life" (Pinchbeck, 2002, p. 23).

Daniel Pinchbeck describes that the psychedelic phenomenological account consisting of two levels. "The unfolding of the self through an increase in perception, cognition, and feelings is one level of the trip" (Pinchbeck, 2002, p.3). He describes the first level as more superficial, where some people think is enough just by acquiring this level because you start unfolding yourself. The other level he explains it as an expansion of consciousness, where you are able to make a rupture in your boundaries, which makes you open a non-ordinary world. Even though he explains the psychedelic experience in two levels, he describes that both are related to each other: "...these two levels are so closely related. It is as the mind were a rocket, gathering force as it speeds along a runaway until it finally lifts into space" (Pinchbeck, 2002, p.3). Here he compares the mind to a rocket that first gathers all consciousness in order to launch.

We can see how Daniel Pinchbeck describes his experience in other words than Leary, despite the fact that the elements are identical. First the metaphor of the expansion of consciousness with a rocket, it is what Leary calls the first Bardo. Leary describes this Bardo as opening your consciousness beyond of what it could be without taking psychedelics. Pinchbeck describes the first level as something that is more physical which Leary explains that in the first Bardo some people may experience physical sensations such as coldness, pressure on the head etc. In the second Bardo, Leary describes the visual effects, which Pinchbeck describes as making the colors brighter: "...those geometric and hallucinatory vistas of unleashed Otherness, revealed to the closed eyes" (Pinchbeck, 2002, p.3). In our phenomenological account, we described how some people can see geometrical figures or shapes in the visual field, which are in constant change while vivid and colorful backgrounds appear.

#### Re-born as a Baanzi

According to Liebermann, you get accepted as a Baanzi, because you have seen or experienced the other world. As Leary defines the different Bardos of the psychedelic experience, he explains how an experienced and spiritually enlightened person can transcend into the second Bardo, representing ego loss often accompanied by intense hallucinations. Instead of quickly moving to the third Bardo, as inexperienced users often do, the experienced user can explore the first two Bardos and enter different levels of consciousness within the second Bardo. The experienced user is now enabled to use his experience to reenter to the ordinary life in a pleasant way. Taking this into consideration, while analyzing the set and setting for the Bwiti initiation ritual, we find a lot of similarities representing the different Bardos when we compare the psychedelic experience on Iboga to Leary's definition. Then intense preparations for the ceremony could suggest that the Bwiti try to prepare set and setting as good as possible shaping the experience.

After having eaten the first amount of Iboga, the initiate is dressed in a white or red dress, which symbolizes blood and re-birth depending on which cult you belong to. This strong symbolism supports Leary's claims of the importance, of the ego release and the role it plays,

in order to fulfill the psychedelic experience and in this case, their rebirth as a *Baanzi*. At the beginning of the session, the release of the ego influences how the trip will evolve, which could be the reason for the enhanced symbolism within clothing. When dressed and intoxicated by the *Iboga*, the initiate has to sit down and rattle with bunches of dry leaves and thistles to the sounds of drumming and chanting, which creates what the Bwiti call *m'congo*. According to the Bwiti, the *m'congo* is channeling the voices of the Bwiti ancestors to the initiate, in order to pass on messages to the initiate. The rattling has to be repeated during the entire trip and according to the Bwiti, serves as a purpose of keeping the initiate steady during his visions (Pinchbeck, 2002, p.26). Before the ceremony, the initiate asks to bring a mirror. While rattling with the leaves, listening to the chanting of the *m'congo*, the initiate is placed in the middle of a circle, in front of a mirror. The Bwiti use the mirror to confront the initiate with their ego and the spiritual dimension (Pinchbeck 2002, p.27). According to Leary's theory, this part of the first Bardo consists of ego-death or release. The first Bardo brings liberation from the ego and the feeling of illumination, which according to Leary is necessary in order to let go and shift into deeper states of consciousness.

Pinchbeck explains how they experience the meeting with relatives, who passed away, divine figures and how different stages of their self-development starts to appear to them, while listening to the chanting and looking into the mirror. Since the ability to release the ego signifies how the trip will evolve, it seems interesting how this specific part has an important role for the Bwiti. The Bwiti considers received messages to have a high importance not only for the initiate, but for the rest of the group or tribe. In some ways, they use the initiate as a tool to communicate with the spiritual dimension. Pinchbeck describes the shaman as a source of guidance, focusing on Pinchbeck's visions through the entire Iboga session. Hence, the shaman keeps pushing him into eating more Iboga, because he does not seem to reveal his visions for him (Pinchbeck, 2002, p.26-28). Pinchbeck is the only one not having any visions at the beginning, even though his two travelling companions were given with beautiful visions. One of his companions meets Buddha and old relatives, indicating that they have moved into the second Bardo and the hallucinatory phase. If we apply Leary's theory on Pinchbecks' case, we can conclude that he seems to have problems with releasing his ego,

relaxing and accepting the event. Pinchbeck describes the following: "Closing my eyes, I saw brightly colored patterns. Spiraling plant like forms and dancing geometries swirled with the music. I fell into a trance, floating with the Bwiti songs. I drifted into a new phase of the trip. Piece by piece, the pattern of my past began to flare up in my mind. For the next several hours, I forgot about the tribesmen watching me. I was witnessing a "memory theater"... I reviewed the elements of my early life - my parents separation, my father's absence from my childhood, the imprint of my mother's loneliness and depression. My own solitude... I saw the desperate, desolate parts of my life and the flashes of power and invention that were also mine. Separate from myself, yet enclosed within myself" (Pinchbeck 2002, p.28-29). Supporting Leary's claim about the importance of acceptance and ego-release, Pinchbeck's trip seems to increase when he starts relaxing. As it is described in the visual aspect of the psychedelic experience, Pinchbeck's visual experience is very similar to the other subjective accounts that we have been investigating. In this case, both geometry and different colorful patterns are represented in the beginning of the new phase. Pinchbeck arrives to a stage when he starts a deep psychoanalysis of himself. It seems like his acceptance of the situation led him to access deeper levels of his consciousness and the psychedelic experience. In his case, it lead to confrontations with memories in his childhood which, according to Leary, is a common experience in the second Bardo.

As mentioned earlier, Leary explains that the interpretation of the psychedelic experience is based on the user's previous experiences and preparations. He describes that both in the first- and second Bardo, the feeling of liberation or illumination can differ according to the skillset of the user. This quote indicates Pinchbeck's feeling of liberation: "I felt a mingling of wonder, sorrow and freedom" (Pinchbeck, 2002, p.29). Taking Pinchbeck's current situation in mind, his mixed feelings during his liberation process is very similar to Leary's explanations in the first Bardo. Pinchbeck explains how the effect of Iboga trip enabled him to see himself and his problems clearly, which played a highly important role in his self-improvement. "The action of the drug actually was - as i had heard it described but wouldn't believe -the equivalent of ten years of psychoanalysis compacted into one interminable night" (Pinchbeck, 2002, p.29).

Today, most Bwities consider themselves as Christians, as different Christian values are being used along with their rituals. Depending on which tribe you are a part of, the relation to Christianity and its role in rituals differ. (Samorini, Giorgio: 5) But even though Gabon has been undergoing heavy development in the past decades, some tribes still favour their old belief systems than the one from Christianity. As mentioned earlier in Leary's definition, the set and setting play an important role in how the visions are interpreted and how visions may occur. In our case, we want to take a closer look on phenomena occurring under these initiation rituals, to investigate the psychedelic experience as the subjective experience it is.

#### Breaking open the head

Pinchbeck explains, after having lived together with a tribe and tried the initiation ritual himself, some of the most extreme ways of initiations takes place in other Bwiti cultures. He mentions the Mitsogho people from the southern part of Gabon, who are well known for their extreme initiation ceremony. The Mitsoghos are maintaining their old belief systems with the identical rituals, and have not adopted Christianity like some other cultures. Their preparation before and until the ingestion of Iboga indicates the importance of the experience and set and setting. Before the ceremony starts, the neophyte gets all of his hair shaved off and pierced his tongue with a long needle. After having eaten Iboga, the neophyte's skull is hit with a hammer three times in order to "break open the head", helping the initiated entering the spirit world. This suggests how other dimensions influence their life and the existence of a physical connection to a spiritual realm. This is one of the most extreme initiations, that show how set and setting plays a part in their psychedelic experience. They do not just consume the root randomly, but go through different preparing rituals, some of which includes pain in order to enhance the experience. Reports of the visions from the Mitsogho tribe consist of meetings with the original Bwiti man and woman, by then visiting the "Village of the Dead": "Suddenly, the "Village of the Dead" is covered with increasingly intense sparks, a "ball of light" takes shape and becomes distinct (Kombe, the sun). This ball of light questions the visitor as to the reasons for his journey. "Do you know who I am? I am the Chief of the World, I am the essential point" (Pinchbeck, 2002 p.33). Above, we

see how the clear light is a part of their experience in addition to the experience of encountering a divine or heroic figure. As in Timothy Leary's first Bardo the clear, white light is one of the first steps of the psychedelic experience and typically represents ego-release and signifies the entering of the trip. As Leary explains the user often feel illuminated and liberated after having experienced the white light. In this case the ball of light, which is described during the trip, could resemble the evolving stage of the trip. It could symbolize the shift from the ego (first Bardo) and the strong, white light representing the transfer to the hallucinatory stage (second Bardo). In the hallucinatory stage, Leary describes how the vision of the Seven Peaceful Deities can appear for the user. He describes the first vision as the source, the appearance of the creator of all things. In this case the clear light changes into the Chief of the world, which for the Bwiti would be considered as their source of creation. According to Leary, this experience is often accompanied by magnificent spiritual or philosophical revelations, uniting intellect with the experience. In this case, the hallucinatory stage brings the neophyte to the creator, and to the other world, which, Liebermann argues, is how you become an Baanzi, -One who have seen the other world. The Mithsogos initiation ceremony lasts for days and the initiates often eat such a large amount of Iboga that they lapses into complete unconsciousness. As mentioned earlier, the Bwiti puts high value in the visions of the initiate. For them the visions and messages achieved from the psychedelic experience, is as important as a Westerner would consider an advice from a doctor or psychologist. According to Leary, depending on how experienced you are as a user, the third Bardo represents the re-entering to the normal life. Depending on the previous experience and knowledge, the reentering can be enlightened or unpleasant. The understanding and acceptance of the knowledge gained, reflects on how you re-enter the normal, awaken life. As it indicates for the Bwiti, the psychedelic experience and what comes with it, is what defines you as a person. The cognitive changes experienced through the visions occurring under the ceremony, seems to be as important for the Bwiti as an education would seem in a Western country. Years after the ceremony, fragments of the visions come back in dreams and imitations. These dreams and visions are used to by the Baanzi through his life as guidance (Pinchbeck, 2002 p.33).

One of the more gentle branches of Bwiti practitioners is the Fang tribe. The Fangs has adopted some parts of Christianity and offers a mixture of Christian and native beliefs. The French chemist, Robert Goutarel, studied Iboga and the Bwiti in depth, visited the tribes and supervised their life, ceremonies and rituals. He reported that the visions from the Fang ceremony substituted Christian symbols instead of native mythology, but ware similar to each other. Goutarel made a brief summary of the visions encountered during the ceremony in the Fang tribe:

"During his journey, he sees many saints, Noah, priests in their cassock. Christ, dressed in gold garments, questions the stranger as to the reason for this visit. And the neophyte answers: "I am seeking, I want to see the Lord Jesus Christ." "I am the one you seek," Christ replies." (Quoted in Pinchbeck, 2002, p34).

Compared to the visions encountered in the Mitshogo tribe, we see how divine and heroic figures occur in the same way for the Fang and as explained by Leary. In the Fang tribes visions are influenced by Christian saints and figures, instead of the Chieftain ones during their ceremony. The change of the visions is explained by Leary in set and setting as long-ranged setting, which includes personal and cultural implications. Together with what mentioned earlier about the previous experience and knowledge of the user shows that, even though the visions differ from the Mithsogo tribe, we see certain similarities as in the acceptance of a spiritual dimension. This understanding and knowledge is also considered to be a long-term cognitive change, due to the change of the Baanzi's perception of the world as it leads back to our quote in the introduction "... one who knows the other world, because he has seen it with his own eyes" (Pinchbeck, 2002, p.9).

## 4.2 The Purge

This part of the analysis focuses on a South American tribe living in the Ecuadorean part of the Amazon rainforest, who mainly uses DMT in a form of Ayahuasca as most of the South

American tribes do, which is mentioned in the previous sections. Daniel Pinchbeck - after drinking it himself a few times - visits the Secoya tribe to take part in a *Yage (Ayahuasca)* ritual. In the book he provides a trip report from his New York and Ecuadorean trips. This analysis will connect to Timothy Leary's description of the psychedelic experience by either supporting or arguing him, as well as to our own account of the psychedelic experience.

"The Secoya culture is based on communion with the 'heavenly people' who live along the river and in the sky." (Pinchbeck 2002, p.144) For Secoyas the 'heavenly people' are God-like figures with whom they interact with through the brew. The elders of this tribe say, that through *Yage* they explore new medical herbs. Herbs that are given by the 'heavenly people' during the rituals, which are basically "extra dimensional explorations" (Pinchbeck 2002, p.166) to them. For this reason, Indians call *Yage* the "forest television" (Pinchbeck 2002, p.153).

## First Experience

During the first *Yage* (Ayahuasca) experience, Daniel Pinchbeck was wearing adult diapers, listening to a tape, which was playing new-age tribal music and surrounded by strangers in a New York apartment. He started the description of his trip by saying: "The Indians revere Ayahuasca for its healing powers. The purging of parasites and toxins is part of the healing process. I felt as if an Alien intelligence was coursing through me, examining my organs and nerves and cellular processes, making subtle adjustments. It was like I was a computer and Ayahuasca was a program performing scans and repairs. When it had done its work I threw up - vomiting was like the beep at the end of the program." (Pinchbeck 2002, p.139).

Just as we say in our description of the psychedelic experience, the trip starts off by feeling physical changes. This is a normal procedure during the Ayahuasca ceremony and it is the cleansing part, when we cleanse our body from harmful substances and energies.

Later Pinchbeck says "Particles like little flares of light gathered into clouds that floated upward- when they arose, my awareness would suddenly switch to a different subject". (Pinchbeck 2002, p.139)

Both of the quotes suit into Timothy Leary's first and second Bardo: the physical changes and the feeling of energy flowing through the body (being a part of the first Bardo) as well as seeing a clear light (as a part of the second Bardo). It is not possible to further analyze his first trip because he does not describe the visual experiences that happened afterwards, he only talks about the cognitive changes, emphasizing on how human thinking works and how meditation is helpful in controlling our thinking.

#### Second Experience

The second time experiencing *Yage* was in his own apartment with two of his friends. He cooked the brew and after drinking it, it started off in a very similar way to the first experience: "I threw up. Afterward I felt, spreading through me, a magnificent sensation. I felt cleansed and strong as the Yage opened my visionary capacity. I lay on the couch as my psychic periscope rose into the imaginal realms." (Pinchbeck 2002, p.142)

We can see that Timothy Leary's first Bardo matches with the happenings in the beginning of the trip again. When the visionary part starts, Pinchbeck describes his visions with a blindfold on by saying "I entered viny jungles, abandoned of our outer space" (Pinchbeck 2002, p.143). and "Geometric mandala patterns appeared" (Pinchbeck 2002,p.143). The visions of geometric mandalas and outer space are matching Leary's second Bardo, within the second category of hallucinations.

After removing the blindfold, he says: "Suddenly, I seemed to be on a spaceship. The creatures piloting the ship shook their long spindly limbs at me in greeting." (Pinchbeck 2002, p.143). These hallucinations also support Leary's second Bardo, most specifically the seventh category. This category talks about a person seeing figures based on his/her psyche and background.

However, Pinchbeck does not speak about how the trip fades out, so the phase of the third Bardo.

#### The Secoya Ceremony

Daniel Pinchbeck visited the Secoya tribe after trying Yage even more times, but he does not mention the other experiences, therefore making them impossible to analyze. In the Amazon, Pinchbeck learns a lot about how oil companies, guerrilla groups and the contact with the Western world are destroying the tribes, their culture and habits. Don Caesario is the shaman and the leader of this tribe of 750 members. He was the cooperator of the ceremony; however "On the day of our first Yage ceremony, Don Caesario announced that he didn't feel well. Worse yet, he had suffered from bad dreams during the night. Dreams are part of the shaman's professional equipment. The ceremony was postponed" (Pinchbeck 2002, p.161). This fact shows how important set and setting are. Leary gives set and setting an important role in his book and in his description of the psychedelic experience. Another quote from the book supports Leary's claim regarding set and setting is when Pinchbeck says after his second trip that "After other successful and failed trips, I understood that this is the deal with Ayahuasca. Compared to other psychedelics, Yage's effects are unpredictable, depending perhaps on the weather, previous dream, the position of the stars. It can unveil the shamanic rainbow, access the universal serpent power, or it can leave you vomiting visionless" (Pinchbeck 2002, p.143).

Pinchbeck was not giving too much attention to set and setting in his first two trips, but for the shaman it was one of the most important, if not the most important part of the whole ceremony. He felt connected with the surroundings and with the brew. "Early that morning, a few of us, myself included, walked up to the vines and looked them over. We even touched them. At breakfast, we learned that our examination gave Don Caesario, who wasn't watching us a splitting headache. Menstruating women also disturbed the shaman. These women were forbidden from going anywhere near the Yage or participating in the ceremonies" (Pinchbeck 2002, p.161). Going back to the ceremony, after drinking the Yage, Pinchbeck was

experiencing the physical effects and going through Leary's first Bardo: "Coldness enveloped me. I felt like a caterpillar in a cocoon, immobilized, receptive, fighting the turbulence in my stomach" (Pinchbeck 2002, p.164). But he was also experiencing changes in perceiving time, which Leary does not mention in any Bardo, but in our own account we do by referring to Alan Watts and Erowid users. "Time seemed to slow down and distend." (Pinchbeck, 2002, p.164). Later "The Secoya sang incredible melodies throughout the night" (Pinchbeck 2002, p.164) as Pinchbeck describes these melodies matched with the shivering in his vision. Since without the melodies his visions would probably be different, this means that set and setting play an important role again, matching with Leary. These auditory changes play an important role in transforming Pinchbeck's visual effects, thus leading him to: "It was as if the ceremonial lodge had become a boat or a spaceship, gliding across dark water, with Don Caesario calm in the helm. The music was like the rudder setting our course...I could sense currents like a magnetic pull following the directions where the songs were carrying us" (Pinchbeck, 2002, p.165). This state can be related to Leary's second Bardo, within the fifth category. This category talks about the individual feeling of oneness with his/her surroundings, just as Pinchbeck feels that they are all on a boat or spaceship, following the directions of the music.

In this part of the experience when a person's perception of noises is so intense, set and setting becomes even more important because as Pinchbeck describes "Every now and then the images were interrupted by someone throwing up in the bushes" (Pinchbeck, 2002, p.164).

During the experience Pinchbeck describes his visions more broadly than the previous experiences "Eyes closed, I saw a grid stretching in all directions. Geometrical forms of strobing spheres and pyramids arose on all the points of the grid" (Pinchbeck 2002,p.164), which is again the second category within the second Bardo. After this he says that "I saw the vague form of a Mayan-like deity..." (Pinchbeck, 2002, p.164), which is part of the second Bardo's seventh category. This category was mentioned earlier when Pinchbeck saw the aliens on the spaceship, however now in a different environment, with different set and setting he sees different figures. This escalates when he says the followings: "The

hallucinations started to deepen into a realm I could not recognise, that I lack language to describe. I found myself wandering across a shimmering space with beings that never stopped changing. The shaman and the elders seemed to be inhabiting this space with me. Glowing in the light cast by the fire, their features seemed animated by an almost nonhuman intensity. Their sang, their words unintelligible, to these creatures, interacting with them, in mystical communion. It seemed like this was the goal of the Ayahuasca ceremony, the arrival point. These were the 'heavenly people'" (Pinchbeck 2002,p.165). This category of open-eyed hallucination cannot even be found in Leary's second Bardo. The figures could be the seventh category, but because of Pinchbeck being unable to find the language to describe it, this stage seems to be so much out of the reality that Leary's description simply does not match with this stage of the experience. Also the seventh category says that those are figures based on the psyche and background of the individual. However, here the whole tribe sees these figures so it is something common and cannot really be called individual; this of course does not apply for the other Westerners who were also undergoing the ceremony, only to Pinchbeck and the indigenous people.

The next day the whole group was examining the experience and it is very interesting how each of them had different reviews. Some were frustrated because of no visions, some felt healed, some were laughing at "the weird stuff" and some were having different visions than Pinchbeck. This shows how subjective the psychedelic experience can be based on a person's ego, mindset, mood, dreams and many other conscious or unconscious processes and states, especially in the Western world, where everything is built up around individualism. In the tribes however they have fewer distractions, many ceremonies and rituals, beliefs and gods, which they endorse daily and that could be the reason why their mindset matches easier and why do psychedelics always achieve what the shamans want them to achieve during the ceremonies.

Pinchbeck at this point, compared to the other Western people in the group was more experienced. He was probably already through the cleansing, purging process due to his previous trips and that is why he was able to reach the final point of the ceremony without

throwing up. Others as he described were throwing up and sleeping, when he was basically just enjoying the whole experience. It is possible, that if they would have already been through such an experience they could also just enjoy the trip as Pinchbeck did.

Set and Setting play the most important role in these rituals and that is why people, like Pinchbeck and the shamans were able to connect. When Pinchbeck used *Yage* by himself, creating his own setting he was throwing up and did not reach such a deep state or visions. This could however open many new questions regarding the individualism of the psychedelic experience. At one point the people who have no or little experience with these substances might end up in different state, but people using these substances more are likely to connect and have very similar trips.

### 4.3 Analysis of phenomenological accounts

Studying Timothy Leary's theoretical account of the psychedelic experience, it appears that many users' reports match his description. Despite this, there are changes which are not mentioned by him, due to the experience being of a subjective nature and depending on the individual.

Leary's concepts of set and setting are believed to be crucial for the experience. This is suggested by a LSD user, who shares her experience: "In preparation, I sit with and accept my karma." (Erowid user 1, 2016). It implies that the depth of the trip depends on one's personal attitude towards psychedelic substances and the level of understanding of the psychedelic experience. Therefore, in order to have a deep trip, one should have a serious attitude towards the theatre of psychedelic actions — personal preparation, time, environment and even clothes that one is wearing. This is what the frame of the trip consists of; the plot of the trip is represented by one's psychological and cultural background.

It is also said that in most cases, where people have had a bad experience following the consumption of psychedelics, the negative experience is directly related to the

misunderstanding of the principle of set and setting. This principle is, perhaps, most easily explained by the idiom "what goes around, comes around". For example, a user of LSD who gives a description of a "chemical self-induced psychosis (bad trip)" mentions his psychological background: "My personal background and trauma connected to the event is, that my parents divorced when I was 7 years, experienced a mild sexual abuse from 13 to 15 years of age, as I also started drinking and smoking around 13 years.". He also says that right before the experience "the atmosphere was depressed and the future uncertain." (Erowid user 2, 2016). That is, if one decides to go through a psychedelic experience while being in a bad mood or with a negative mindset, one should be prepared to experience a bad trip. Also, if one takes psychedelic substances in an inexperienced company of people, being afraid of its effects and consequences, one should not expect a good trip, because the fear might leave a mark on it. An example like that is the first experience with LSD of a 46 year old man who always had a fear of drugs. This is how he described his first experience: "I very suddenly had, in my vision with my blindfold on, a vision of a horse head, completely skinned and bloody, all muscle and fat and skin hanging off of it, with eyes staring at me. That shocked me. Oh boy, I thought, here comes a bad trip." (Erowid user 3, 2016).

As part of set and setting, for beginners, a highly desirable element of the psychedelic experience as Leary suggests, would be a guide, preferably, a person who is familiar with such experiences. An inexperienced person, who doesn't know what to expect, can easily get scared and panic. That is why it is recommended to have a guide who can calm down the person in case of inadequate actions. The guide serves as an anchor or ground control for the person who is going through the psychedelic experience. Something similar is described by a girl who tried LSD for the first time: "Before I started getting too out of control collecting stuff, our sober friend asked if I could get him a beer to distract me." (Erowid user 4, 2016). This subjective experience shows how a guide (in this situation her friend) distracts her from unnecessary thoughts or actions by changing the topic and asking her for a favor.

Another stage, namely the Clear Light and ego release described in Leary's theory takes an important part of the psychedelic trip. Here are some accounts of users experiencing it while on different substances. For example, the concept of consciousness expansion or ego-death from the first Bardo is described by a DMT user in more details: "I began to think about the cliché routine of asking myself about the imminence of my own death. I knew intellectually that I was safe, but I could not help but acknowledge that the sensation could only be described as dying. My self, my fears, worries, attachments, all of these things were no longer relevant. The only thing that was in essence real was the single eternal moment that I found myself occupying." (Erowid user 13, 2011). This subjective experience shows how facing death can relieve one from fears, worries and even the self. Perhaps in other words, facing death can help one detach from materialistic worries. Another user 'travelling' on mushrooms experienced illumination, which is also an experience of ego release explained in the first Bardo: "...I eventually came to a place that was filled with bright white light glowing absolutely everywhere in my vision. If I recall correctly I imagined it being just a round sphere illuminating light and love. A transparent image was being repeatedly looped over and over again..." (Erowid user 10, 2013). This subjective case of illumination (ego release) could be interpreted as one cleansing the spirit and getting relieved from materialistic worries (as mentioned in example above). Love, on the other hand, which is a symbol of purity and innocence, could be understood as the first feeling entering the cleared and liberated spirit after the ego release. However, this is an abstract concept and is better perceived as a central point that the individual sticks to during the experience. This is also elucidated by a LSD user, who was subconsciously perceiving the sky as Clear Light during his experience. This phenomenon makes the subject let go of his ego and have positive feelings: "I looked up at the sky, and it was beautiful, vanilla coloured clouds at 6 in the morning. I felt whole, joyful, and this vanilla sky thing stuck in my head in the acid sort of fixed idea." (Erowid user 10, 2013). The accounts mentioned above do not only cover Leary's theory, but also denote that people can experience the consciousness expansion process without religious implications.

Some of the users experience strong emotional changes during their trips. Timothy Leary explains that the most intense changes occur in relation to the second Bardo during a psychedelic trip. According to his statement it can manifest in two different aspects: under the third type of hallucinations, it is connected with positive emotions of love and under the fifth type of hallucinations, it is connected with an intense feeling of empathy with people and unity with objects (Leary, 1964). A trip report on Peyote shows the overwhelming emotional changes that Leary connects with the third type of hallucinations of the second Bardo: "An overwhelming sense of joy and even a sense of love infused my whole body. So I started to laugh, very loudly. I laughed so hard I began to cry. My tears were not tears of sadness or of pain, but of a giddy and even childish joy at all that was occurring to me." (Erowid user 17, 2011). As this subjective evidence proves, people under the effect of psychedelics are more sensitive and experience emotions with a higher intensity compared to what would happen in their ordinary state. As the psychedelic effect intensifies and the subject melts deeper into the experience, deeper levels of the consciousness unfold. Arriving to these different phases can reveal emotions that were previously hidden in the subconsciousness and bring them to the surface.

Another phenomenon, particularly the feeling of unity with the world and with the objects around, is explained by a person who used mushrooms: "Everything was one and I was everything. I was the trees, hills, mountains, your brother, your sister, mother, dirt, paper, pen, mother earth and the universe. The universe was me and I was the universe. Every star, blade of grass or drop of water, breeze of cold air on a warm day, was essentially me." (Erowid user 10, 2013). A revelation such as this, perhaps originates from the inherited feeling of empathy for the people and the world around us, and the fact that we are fundamentally the same as everything surrounding us. Perhaps all the mushroom does is strengthen this feeling. This feeling of empathy, if only limited to the people and things closely related to us, will leave us ignorant and careless for the suffering that takes place beyond our reach. If we all would realize that we are essentially the same as everything around us, perhaps we would treat each other, and nature, with respect. Another user experiencing highly increased empathy towards people supports Leary's theory in relation to the second Bardo under the fifth type of

hallucination, he says: "I felt heightened empathy with even the people I perhaps disliked, and tangible antidepressant effect." (Erowid user 18, 2007). This phenomenon shows how the substance affects the subject by increasing the feeling of empathy, unlike natural feeling of apathy to one's disliked people. In this case the connection towards people that are disliked is increased.

However, there are some accounts of emotional changes that are not mentioned by Leary. Stanislav Grof's analysis of LSD sessions proved that emotional changes may vary in several additional aspects as well. As the emotional changes take constant part in a psychedelic trip, besides feelings connected with love and unity (euphoria, unmotivated laughter, exuberant joy, deep feelings of peace, hedonistic pleasure, orgiastic ecstasy, sensuality), negative mood changes can also manifest from minor to major degrees (depression, quite sadness, tearless melancholy, anxiety). In some cases these negative mood qualities can increase up to the point where the subject experiences a profound fear of death and feeling of panic (Grof, 1975). A mushroom user illustrates this negative way of thinking that can generates panic and fear: "I felt like a weak, lame loser with no heart to overcome my fears" (Erowid user 19, 2003). As the mushroom seems to strengthen all aspects of the individual's unnoticed or subconscious thoughts or emotions, it could be interpreted that the mushroom reveals the deep insecurities that the user might have. As the user is confronted by this dreading feeling, he gets the choice to overcome it. As the first step of solving a problem is to recognize that there is a problem. Later in the process of his trip, he did overcome his fear: "This plus Matt's positive verbal walkthrough of the climb helped me to muster the courage to, step-by-step, pull-by-pull make my way to the plateau.' '(Erowid user 19, 2003). Grof also says that agonizing inferiority and feelings of guilt can be very frequent. A user on Peyote identifies with the sense of guilt in the following way: "What awaited me was the "hell" and a sense of guilt and horror at all of the things I had taken for granted in my life." (Erowid user 17, 2011). This aspect of the self-realizing process can have a beneficial long-term effect on the user. When subjects confront the mistakes they have made in their lives, it accompanies an increased sense of guilt and leads to a more judgmental way of thinking about the self.

Among the visual changes, we can distinguish between closed-eye and open-eye phenomena. In relation to the second Bardo from Leary's account, the first type of vision is related to hallucinations of different divine and heroic figures with closed eyes, something like that was experienced by an Ayahuasca user: "I was in the desert, surrounded by a green ocean. This is when I believe God appeared to me." (Erowid user 23, 2009). The presence of a higher entity (usually subjects identify it with God) is very frequently felt by psychedelic users. Many who had previously non- religious beliefs would mention God during a psychedelic trip. The following trip report on LSD illustrates this case: "You can't hide from the eyes of God, I began weeping, collapsing onto the floor. I'm not at all religious, yet for a while I kept wailing that: You can't hide from the eyes of God." (Erowid user 33, 2010). In 2013 a survey was conducted at the Norwegian University of Science and Technology by PhD Teri Krebs and clinical psychologist Pål-Ørjan Johansen, concerning the possible long-term effects of classical serotonergic psychedelics (LSD, Psilocybin, Mescaline, Peyote). The questions in the survey were asked many years after the experience to see whether long-term cognitive changes had occurred in the subjects. It was shown that a small amount of people's religious beliefs were altered from the one reported before the psychedelic trip.

The vision is also elucidated by a mushroom user: "...then I saw a woman. I don't know exactly what she looked like, and so on, but I stepped closer to her... She was Mother Earth. For a moment I was bewildered." (Erowid user 15, 2000). These visions denote that, under the influence of psychedelic substances, people tend to perceive the surrounding nature or the planet Earth as divinities. In this context, individuals are likely to have more respect for the natural environment, as it represents the embodiment of God.

Even if Leary mentions many types of visual changes occurring with eyes closed, his theory does not cover all of them. With eyes closed, subjects may often experience after-images as well, which are persistent dynamic images of objects, previously seen in the environment that can change into complementary colours (Grof, 1975). An Ayahuasca user refers to this type of

closed eye hallucination: "I was getting lots of pretty closed eyed visuals and intricate colored patterns all over everything." (Erowid user 24, 2002). Furthermore, the floaters that we perceive as visuals occurring in the eye itself (entoptic phenomena) can be seen as fantastic sceneries, such as tropical jungles, mysterious islands and coral reefs (Grof, 1975). As previously mentioned, geometrical shapes and kaleidoscopic displays are one of the most frequent visual perceptions that are underlying all the images perceived with closed eyes. These patterns are often compared with decorations of interiors of temples, Gothic cathedrals or cupolas of gigantic mosques: "A seemingly infinite architectural landscape begins to reveal itself. Resplendent bejeweled cathedrals of ever changing sacred geometric patterns move in and out of form." (Erowid user 25, 2013). This account emphasizes that people are also likely to see visions related to their culture or religion. Since cathedrals are perceived as sacred buildings in Western culture, visions of them can eventually bring users closer to a figure of divinity such as the concept of God. Depending on the cultural background, individuals may also have hallucinations of other sacred places, such as temples or shrines in the Eastern culture. Some users also describe similarities between abstract paintings by famous painters, as the following experience exemplifies: "Eyes closed, I see what looks like Alex Grey paintings moving upwards to a single point in my head." (Erowid user 26, 2016). This account is also an example of how the cultural background can subconsciously leave a mark on the visual changes.

With eyes open, as we previously described, the perceived objects seem to pulsate and have blurred contours; colours are bright and vivid, very frequently characterized by geometric shapes. They often have disproportional and transformed shapes. Many people have the sense of nearing an understanding of art and gaining a deep insight of what the artist had visualized when creating the artwork (Grof, 1975). Afterimages occur with open eyes as well, and the effect is very similar to the ones with closed eyes: "If the direction of gaze was changed rapidly, sharp edges left discrete stroboscopic afterimages lasting for a second or so." (Erowid user 27, 2009).

Also, regarding the visions with opened eyes, Leary mentions, under the fourth type of visuals of the second Bardo, the perceptions that are filled with wave vibrations (Leary, 1964). It is usually connected with oneness and positive feelings of unity. The next subject on DMT describes this type of visual alteration accompanied with the same emotional quality: "Suddenly, there were flashes of wave energy that originated from what I perceived to be a horizon in the dark distance behind the line. I felt a level of love and peace that I can't really put on paper. This love was similar to what I had felt when meditating alone without substances but much stronger and coupled with visuals and sounds that linked to my feelings at a higher vibrational level." (Erowid user 28, 2013). This account emphasizes that visions are in a strong relation with emotions, since the positive feelings are pictured as energy waves. This phenomenon can make the subject experience those feelings at a higher intensity. Considering the relation between emotions and visions, negative feelings of separation, loneliness, helplessness, hopelessness or feelings of being trapped in an endless suffering can highly alter the visual field as well. In some cases the user may confront the limited duration of lifetime, which can make life itself meaningless. At this stage the user only sees ugly and bad aspects of existence, which can lead to visions connected with apocalyptic scenarios. This type of visions is similar to Leary's account of the third Bardo, which mainly represents the returning of the subject to reality. A world can be seen where diseases, war, epidemics and destructive forces make people's life unbearable. The following subject who consumed Ayahuasca reflected on his trip afterwards with the followings: "I can't even imagine revisiting this state, it so deeply moved me, altered me, filled me with apocalyptic visions and fears, pain, love, acceptance, and anguish." (Erowid user 30, 2010). According to Leary, the visions about the real world being destructive are often a consequence of not realizing that the phenomena experienced in the second Bardo is just a reflection of the mind. People can be stuck in this phase of believing that the reality is the one experienced in the second Bardo and become influenced by that while the effects of the substance wear off. In this context, when the user starts to get back to reality, everything seems extremely negative. The user may begin to philosophize about the meaning of life and in some cases it can take a longer period of time to accept reality again.

Another very often appearing vision that is connected with the same emotional mood, shows a dehumanized, futuristic world of robots or hell. The following user on DMT illustrates the subjective evidence that matches this type of visions: "When I analyzed the room again it was a bustling, futuristic metropolis. It appeared very large and very alien, with shining chrome and flashing lights everywhere." (Erowid user 20, 2016). This vision is also similar to the phenomena described in Leary's account of the third Bardo, when the subject is struggling to come back to reality, which seems to be cruel and strange in the altered state of mind. Since the psychedelic experience is related to non-material things and consciousness expansion, the materialistic reality appears as an extremely non-familiar environment, which makes the subject see it from a negative perspective.

Contrary to the negative hallucinations mentioned above, people may have visions, regarding different surfaces that can be seen as exotic sceneries with abstract faces and mysterious animals: "At other times, everything around me swirled into rainbow storms of birds and insects that looked like a cross between moths and the leaves and tendrils of exotic plants. Often I saw myself floating above clouds and mountaintops alongside bizarrely animalistic spiritual beings." (Erowid user 29, 2010). This vision occurs with the eyes opened and can be interpreted as an aspiration to bring the spirit closer to nature, which may be related to the vision where nature is perceived as a divinity. The user may realize the beauty of nature, but also its power or even perceive it as a spiritual sanctuary. Even if this type of visions is not mentioned in Leary's account, it may be a premise of the third Bardo to experience negative hallucinations. After being in a strong spiritual relation to nature, the subject may feel lost when returning to reality and thus have negative visions, such as those mentioned in the paragraph above.

Another type of hallucinations which are mentioned by Leary are the wrathful visions. His idea is further discussed by Grof, who states that users who see "wild nightmares" can relive an unpleasant memory with strong, negative emotional charge. These experiences can differ from simple reliving of recent memories to childhood memories, and they can be defined as a complex mixture of the unreal and real material. Visions become confused and detached: "I

didn't know if it was a person, a place, a creature, a spirit, or merely just a state existence. All that I knew about it was that it was by the far the worst thing that could happen to you. It was any man's worst nightmare times a thousand." (Erowid user 31, 2012). This type of vision occurs when, according to Leary, the individuals cannot let go of their ego. In this case, the subject is bound to events from the past, something that hinders the consciousness expansion process. In this context, the wrathful visions can make the subject feel scared and turn into a nightmare.

In his book, Timothy Leary also describes auditory changes under the second Bardo as "clicking, thudding, clashing, soughing, ringing, tapping, moaning, shrill whistles" (Leary, 1964, p. 24) sounds. One of the users' experience is very similar to Leary's description. In his auditory involvement on DMT, he says that tinkly metallic sounds were involved. It sounded like someone was dropping metallic bearings on a metallic plate. Generally, he expresses these sounds as low-frequency radio noise: "I find the sounds quite similar to audio-domain recordings of very low frequency radio noise caused by distant thunderstorms. These sounds, called spherics". Here we can see the similarity of sounds that both Leary and the user describes as short clicking, tapping sounds, where no melody or any other definition of sound is mentioned. In this case, since there are only these mechanical sounds involved, the way user receives sound could be interpreted as codes or numbers traveling to the receiver and then being analyzed by the brain, which then converts it to sound. The user discusses it in his experience: "I'm not suggesting that the brain picks up these signals, but I do think the mathematical mechanism of frequency-domain smearing of noise bursts may be common to both of these phenomena, particularly as this is very much the analysis that the brain is doing in the auditory system - dividing sound into a number of frequency bands." (Erowid user 20, 2016). This subjective experience of a user is similar to Leary's theory, which suggests that it is not clear: "whether sensations originate in the auditory apparatus and/or in the auditory cortex or whether they are flashes of direct, molecular sensations in other areas" (Leary, 1964, p. 20).

In contrary to the short, mechanic sounds mentioned above, another user shares his experience highlighting sound as melody. Even though he claims he did not feel a strong auditory change on DMT experience, it still affected him. "Though the music didn't sound different at all, it was the most beautiful thing I've ever experienced from an auditory...point of view" (Erowid user 21, 2013). According to this subjective experience of a user not feeling strong change of sound, the effect is still mentioned "...as if reality was...showing me the beauty in its raw form." (Erowid user 21, 2013). This phenomenon shows that even though the sound did not change or become distorted, it had an impact affecting user's attentiveness. Since the user expresses himself as seeing the beauty of music in its raw form, meaning that it was noticed by paying more attention (to music) than usual, which was caused by the psychedelic substance. This subjective auditory experience shows how different forms of auditory changes can influence a person to notice details that have not been noticed prior to the experience (Erowid user 21, 2013).

Another subjective account is one of a DMT user experiencing sound at its speed: "It was like sound slowed to a complete stop & as it slowed I could catch the intervals between the sound waves as they registered in my brain. It slowed more & more until it just stopped completely." (Erowid user 32, 2009). Unlike in Leary's account, clicking and thudding sounds are not involved in this experience. Opposite to that, this phenomenon manifests as detecting the speed of sound. It is natural in an everyday audition, that the sound is received instantly; however, this user perceives the sound slowing down and noting gaps between the soundwaves by catching them. In other words, he experiences the sound in a different time frame which helps him enter a different (new) time dimension.

Even if they are not mentioned by Leary, cognitive changes are also an important part of the psychedelic experience, because they represent the subjective accounts of the individuals. These changes can be divided into the long and short-term. Cognitive changes are often perceived as the mere consciousness expansion process, as they could be helpful in getting rid of addictive behavior such as opium addiction or legal substances such as tobacco and alcohol (Website 17, 2012). The psychedelic experiences such as the cognitive changes will

always be subjective for each person experimenting because they are strongly dependent on the psychological background of the specific user.

The strong negative or positive emotional alterations during the psychedelic experience can lead to a profound cognitive long-term impact on the user. For some people the cognitive changes after the psychedelic experience are so influential that they are left with a strong will to radically change their life. A user on Peyote concluded the following: "It felt like a direct experience of something divine. Though reminded of my imperfections, I was imbued with a renewed sense and desire to overcome my imperfections and to somehow make them right. The beauty all around me was evidence enough to convince me that I had to do something different with my life and to perceive the world in a better light. I had to change some things and become a better father, husband and person." (Erowid user 17, 2011) This was a firsthand experience of a user who tried Peyote within the Native American church. In this subjective experience, we can see how Peyote substance changed his way of thinking about life. That is understood as a long-term effect because it affected his way of living following the experience. In some cases to incur cognitive change and receive `the message`, a single experience can be enough. A good example of it is a user of Peyote sharing his experience receiving a message from the first time: "I do not know if I will ever take a hallucinogenic substance ever again. It is not that I am presumptuous enough to claim I have learned or experienced all there is to know about these experiences, but quoting Alan Watts, "When you get the message, hang up the phone" " (Erowid user 17, 2011).

The short-term effects are described as an immediate response when you take the psychedelics: "I saw all of my wrongs and all of the wrongs of my ancestors, and I saw the path to righteousness and the path to evil. I saw the light and the dark and knew that I had the power to choose my destiny. I saw the truth" (Erowid user 23, 2009). These experiences are essential for when the user is searching for something specific within the psychedelic experience. For this user, visions of the past surfaced with the purpose of giving a new and better path. This is a short-term effect because the realization of truth comes with the immediate effects of the psychedelics. Also, the description of the user implies that the

visions can help to have new life perspectives which are subjective for everyone and, in this case, it gave an insight of one's life.

Another account of a short-term cognitive change is given by a Peyote user: "I had a certain sense of the things about me as having a more positive existence than usual. At this time, also, I had a decisive impression that I was more competent in mind than in my everyday moods. I seemed to be sure of victoriously dealing with problems. My own mood was gently flattering—a mere consciousness of power, with meanwhile absolute control of every faculty." (Erowid user 22, 2005). From this subjective account, we can point out that general feelings like happiness can surface the strong or high sensations of spiritual uplifting, and also that the occurrence of mood enhancement can happen in the moment.

A user after taking Ayahuasca demonstrates the long-term cognitive effects that the psychedelic had on his life:"Reflecting upon my experience, I am no longer the same person. First of all, the Ayahuasca literally did heal me of certain gastrointestinal discomforts that I had had since first grade. I feel much more in touch with my body as well. I no longer drink alcohol; I have absolutely no desire to use drugs for temporary pleasure. I exercise on a daily basis. I feel as if my life actually has a purpose, and I can't waste any time. I need to live in the moment, and just have as many experiences as I can. I've never felt more happy, and content with my existence." (Erowid user 34, 2012). This experience allowed the user to give up his fear of death and this factor played a crucial role in having the above mentioned long-term effects. Despite the fact that the trip was filled with positive or negative charges, it is rather common that after using psychedelics, people will react similarly to the user above and become more aware of the passing time and live more consciously in their everyday life.

## 4.4 Evaluation of the Analysis

What we can evaluate, in regard to Timothy Leary's account, is that it is a fairly accurate description of the psychedelic experience. It is shown that the Bardos and the importance of set and setting can be seen clearly during the analysis of the other psychedelic experiences.

However, his account lacks detailed information, which could help a person lacking experience get a deep understanding of the experience. This is where we believe our own account finishes what Leary left unfinished. We accomplished that by providing the inexperienced reader with a more detailed overview of the psychedelic experience and all its aspects, supported by phenomenological accounts. However, we used Timothy Leary's account as a framework for the psychedelic experience, to which we then added the information that we believed it to lack. The added aspects consists of things such as a variety of different negative emotional changes, a variety of closed-and-open eye hallucinations, the negative experiences related to the third Bardo and more, all which we believe are left unmentioned by Timothy.

## 5. Discussion

## Influence of set and setting

As we have learned in the analysis and from Leary's account, the experience of the users combined with their social relations and background, affect the psychedelic experience and how it will unfold. The different Bardos represent how the user undergoes the experience and the capability to accept the situation, understand or embrace the experience. Addition to this, the ability to integrate the insights of the experience back into reality is represented as well. Through our analysis of the different subjective psychedelic accounts, both in cultures and amongst different users, there is evidence suggesting that cognitive changes and influence of it depends on the set and setting. As Leary explains, in the first Bardo the ego release is an important factor, when entering second Bardo and enhancing the experience. One of the key parts of the preparation is the ability to follow the flow and accept what is going to happen. When we look at the Bwiti and how they prepare for the ceremony, we see how the different strong symbolic references towards the ego release and rebirth assist the initiate throughout the trip. As we learned from Pinchbeck's experiences with the Bwiti, we see that the initiate is

undergoing a different form of guided ceremonial parts during the psychedelic voyage. In his description, Leary recommends that one should use a trip sitter while undergoing the psychedelic experience. The trip sitter's job is to help and guide the initiate through visions and experience in order to understand and undergo the most pleasant and useful moments. As we see in the Bwiti and other tribe cultures, the shaman is the one who takes care of the initiation or guidance throughout the experience. Contrary to that, in Western society since the use of psychedelics is illegal and the psychedelic experience is ridiculed, the possibility of guidance (if needed) throughout the psychedelic experience is very low or even none. As we have learned from Pinchbecks own experience with Iboga, he was having troubles experiencing visions and struggle with acceptance of the situation. The reason of that was, according to Leary's theory, related to ego release and the the ability of acceptance. In the end of the book, many years after his experience with Iboga, Pinchbeck says: "Both Gurdjieff's philosophy and the psychedelic experience suggest that spiritual growth requires increasing our level of self-awareness and refusing to identify with any external agency. Perhaps our belief systems, and even our socially constructed personalities or egos, function like layers of insulation that must be stripped away if we want to discover what we can become." (Pinchbeck, 2002, p.256).

Pinchbeck's quotation above suggests that Western institutions and social constructions separate and block Westerners (their ego release) in their psychedelic experience. According to Leary's theory of the first Bardo, this could be the reason why for the last few decades psychedelics in the West are used for leisure reasons instead of awakening. Socially constructed personalities and tendency to follow for example fashion, popularity, money, religion, social status or celebrities and their lifestyle, leads one to become someone else. That is suppressing who one really is and blocking the exploration who one could become. Therefore instead of using psychedelics as mind exploring tool, most Western users use psychedelics as a tool for leisure and fun. Due to this, long-term cognitive changes often do not appear to Western users. Leary mentions that an experienced psychedelic user keeps coming back to the first Bardo to restart the psychedelic experience or to get a new enlightenment. Instead, Westerners seem to be bound to the ego and deny the possibilities

of the uncertain. This could be due to the hectic everyday life that most Westerns live dominated by work, loans, fear of missing out and etc. "Today we use less and we use more of our mental capacity than we did in the past... we have sacrificed perceptual capabilities for other mental abilities to concentrate on a computer screen, while sitting in a cubicle for many hours at a stretch, or to shut off multiple levels of awareness as we drive a car in heavy traffic. In other words, we are brought up within a system that teaches us to postpone, defer, and eliminate most incoming sense data in favour of a future reward. We live in a feedback loop of perpetual postponement. For the most part, we are not even aware of what we have lost." (Pinchbeck, 2002 p. 60-61). Instead of pursuing materialistic goals and living in the feedback loop as Pinchbeck describes it, the tribes entirely pursue other goals. As discovered in the cultural accounts of the psychedelic experience, the results and effects of their psychedelic ceremonies are often of great importance, just as people in the West gets baptized, confirmed or celebrate when they become of legal age and become a grown up. The whole experience and the ceremony are institutionalized in tribal culture and religion is just as psychotherapy or psychology in Western society. It would seem that in the West, these religious or spiritual milestones resemble responsibility and decisions about who you want to be. These Western ceremonies are often followed by huge amounts of presents, such as money, cars, apartments and so forth; instead of starting their own life, exploring who they really are without their parents or the same social construction which they are used to live with. This creates a huge distance to the understanding of the self, which could be the reason why a popular phenomenon in Western cultures is backpacking through Asia or South America. This experience often results in becoming way more mature and having a deeper insight. When we look at the Bwiti and their initiation ritual it is similar to the Western confirmation or baptism, for example. Though, instead of pursuing materialistic or religious purpose or dedication, they pursue personal development and acknowledgment of the existing of the unknown. The initiation is not about reaching a certain goal, but about starting a journey towards more. The understanding and acceptance of another spiritual dimension is for the Bwiti their certainty, where for a Christian it would be accepting Christianity as his/her religion.

As we unraveled in the analysis, revolving around the difference between experiencing Bardos in tribal culture and Western countries, it is noticeable that Westerners often skip the second Bardo. In this context, it is interesting to discuss a possible reason for omitting this part, given that is considered as possibly the most important in the tribal psychedelic experience. Omitting the second Bardo, which is usually where 'messages' are received through the hallucinatory state, is usually caused by disability of ego release, in other words, self-confrontation. In Western culture, a major influence for this phenomenon could perhaps be the impact of materialism (Website 18, 2016). Most of the people living in Western countries are strongly affected by materialism and capitalism, which creates disconnection and neglecting of spirituality and our inherent connection to nature. By living in such an environment, one's mind and body are constantly occupied by all kind of different information. The overload of media, events (potentially commercialized), assignments, appointments, materialistic goods and worries etc., which quite often is unnecessary, affect the Westerner, even though we often do not realize or admit it. Since the mind and body is in constant occupation and rush, it obviously affects one's connection with the self. There is no time left for communication with the spirit, as D. Pinchbeck writes in his book: "It is only in the "rational" West that we refute the possibility of such contact-blocked by our blind faith in materialism." (Pinchbeck, 2002 p.100). Sometimes it is not clear if materialism creates such issues on the purpose of spirit destruction. D. Pinchbeck quotes W. Benjamin, calling capitalism "a religion of destruction" (Pinchbeck, 2002 p.100). Due to the disconnection with spirituality, death, in a materialistic world, is considered the end of everything (Pinchbeck, 2002). That concept causes quite often depression in people, the reason why alcohol and 'antidepressants' are used to numb the dreading feeling of inevitable doom: "We drown ourselves in alcohol or medicate ourselves into rigidly artificial states with antidepressants." (Pinchbeck, 2002 p.100).

In the Western world, the development of technology is in a state of exponential growth. The purpose of it (for example computers, apps or GPS) is to make life easier for us, by assisting us in everyday situations. Unfortunately, without any awareness, it affects one in the opposite negative way such as intuition denial, and a limited usage of the brain: "What had been

banished from memory and suppressed from awareness could now be enjoyed as spectacle, or ridiculed from the patronizing perspective of the rational critical mind. In the modern world, the artist took over the role of the shaman. To enforce one particular mode of consciousness, modern humanity forfeited all direct contact with its nonhuman shadows." (Pinchbeck, 2002 p. 68).

We could conclude that perhaps for Western users, who have difficulties with ego-release during the psychedelic experience; the biggest influence is the constant mind-occupation of unnecessary data. We keep overloading ourselves with emotional discoveries and distractions, exploiting every moment for social acceptance. It happens through the number of followers on different social media, the number of likes received on your latest updated profile picture or the huge amount of stress and pressure from friends and society concerning your performance. Western society, due to its close ties to production and industrialism, is focused on fitting situations and people into different boxes. Our stream of information and news is completely different today compared to twenty years ago, due to the invention of internet and smartphones. Through phone calls, text messages, emails, social media etc., we are constantly feeding ourselves with information or comparing ourselves to materialistic goals. This often results in a lack of self-exploration and realizing the needs we have as a person, and not as a product or some idealistic picture. We lack time for self-development and search for inner peace or explore other possible dimensions or certainties, as much as our attachment to materialistic values neglects the importance of it:

"The shamans of the Tarahumara Indians told...that the Whites had been abandoned by the spirits. Perhaps we are only abandoned because we push the spirits away." (Pinchbeck, 2002 p.100). Though, contrary to those experiencing difficulties releasing their ego, there are psychedelic experiences of Westerners, analyzed above, successfully releasing their ego; accepting the situation and understanding the message which might change or influence their personality and/or their life. Perhaps those are the ones who are not strongly affected by materialistic desires or feel a strong need to escape the world of materialism.

## Psychedelics and Religion

As it can be noticed through the accounts given in the latter chapters, the psychedelic experience may turn into a religious or spiritual experience. However, religion is considered to be incompatible with psychedelics use.

In Buddhism, there is a theory regarding the right outlook on life, which includes a list of activities that are denied or prohibited. One of the activities mentioned is producing or trading toxic substances which could intoxicate or kill someone (Website 19, 1996) and another is abstinence from any fermented beverages which would hinder mindfulness (Website 20, 1996). This concept implies that alcohol is not permitted in Buddhism, even if there are some exceptions such as Tibetan Buddhism, Zen Buddhism, and others. However, nothing is mentioned about mind-altering substances such as psychedelics. More than that, Buddhism does not accept substances which would hinder the mind-enlightening, which means that psychedelics could be even encouraged since they can expand the boundaries of the human consciousness and there is still no plausible evidence of them doing harm to the human body. Another point is that the Buddhist concept of birth being the reverse process of death is similar to Leary's concept of ego-death, as it is perceived as a rebirth or consciousness expansion process; for, in order to enter another spiritual level and experience a rebirth, one should let go the ego.

As Buddhism (and Eastern philosophy in general) is flexible to the new findings of the modern science, it better represents a way of life. In Christianity there is a clear delimitation between people and God, and there is also a tendency of humiliating the self and venerating the divinity. In this context, the psychedelic experience is not understood by Christians (mostly Westerners). Since during the psychedelic experience an individual may have a death experience, see God or even perceive himself as God. It can turn into an absurd or even terrifying experience. The conservative nature of Christianity does not allow people to develop their knowledge and, especially, expand the boundaries of consciousness, as at one point it may contradict the doctrine and question its veracity. An interesting thing related to

Christianity's constraints is that there has been a tense relation between the Bwiti religion and the Christian church, due to their primitive rituals. One of the Bwiti's ecumenical religious leaders, Nengue Me Ndjoung Isidore once described the difference between the Catholic church and the use of Iboga: "The Catholic church is a beautiful theory for Sunday, the Iboga on the contrary is the practice of everyday living. In church, they speak of God, with Iboga, you live God" (Quoted in Swiderski, 1990-91, vol.I:628). This is also emphasized by the Marsh Chapel Experiment, which was led by Timothy Leary and Walter N. Pahnke, who was at that time a graduate in medicine and theology. In this experiment, twenty theological students were given Psilocybin, ten were given a placebo and all of them were sent to a Good Friday service. Thereafter, students who had the experience on Psilocybin reported having a mystical religious experience which got them closer to God (Website 21, 1968). This experiment showed that psychedelic substances would act as entheogens or religious experience generators. Even if there is no evidence that Christianity does not allow consuming psychedelic substances in particular, among Christians they are still considered as harmful substances. However, consuming alcohol and smoking tobacco is allowed in most of the Christian denominations, even if that causes harm to the human body.

As psychedelic substances can generate mystical experience, some religious institutions encouraged the use of it. A good example of that is the Native American Church. In the last hundreds of years, Peyote cult provoked controversy in North America. By federal law, recreational Peyote use in North America had always been illegal. However, for spiritual or religious purposes Native American Church members became an exception from this prohibition. Until they did not form a church, the U.S Authorities banned the Native American use of Peyote. In 1970, Texas state declared the use of Peyote legal and in 1976 Alan Birnbaum founded a Native American Church in New York, which was a significant breakthrough for Native Americans. There is no evidence that Peyote would harm users, but there is evidence that 'Peyotists' lacked the tendency to consume alcohol and became reliable parts of their families and communities (Website 21,1968).

# **Psychedelics and Society**

Cultures and societies have always encountered problems with violence and war. In cultures like in Gabon, more specifically for the Bwiti tribe the use of psychedelics takes a big part in their behaviour and how the people interact with each other. Hence, Bwiti is known for being pacifist and more peaceful among Gabon. Mexican and South American tribes are also known to act in a peaceful way. The ingestion of psychedelics in tribal or spiritual circumstances has provoked a calmer behavior. If we contrast the tribal peaceful way of interaction with other cultures like Western culture, we can see how violence and war have always taken a big part of the history. War has always been a source of money for each country, a good example being the USA.

When psychedelics were rediscovered by the Western societies, they were initially considered by psychiatrists to be tools that would cause a revolution in the studying and understanding of the human psyche. In addition to this, the amazement of the capabilities of the substances was enhanced by the fact that they appeared to be stunningly safe. However, this view changed not long after 1960s as the same substances that were believed to provide insight into the deepest secrets of the human mind, now were linked to a social uprising, namely to the hippie movement. As these substances proved to be catalyzers for the uprising of youth, preaching anti-war and peace, they were consequentially ridiculed by the media worldwide. A big influence for this movement was psychedelic substances. Thoughts of love and peace were their motto and as well as one of the main ideas was the fight against the US involvement in the Vietnam war. In this movement of peace, it was important to connect with people and to avoid any kind of violence or provocation that would later proceed to war.

# Medical benefits of psychedelics

As almost all societies consider psychedelics as Schedule I drugs, gaining valuable knowledge about psychedelics remains a challenge. A small number of short and long-term experiments

that were temporarily encouraged through the past century left us with a useful but small amount of data.

In 1965 in Czechoslovakia there was no intense black-market traffic of psychedelics, however, medical use was supported and sponsored by the government. Government manufactured LSD was legalized for therapeutic purposes only. It was easily accessible for qualified professionals who had a specific education as an LSD therapist. Those who were healthy and wanted to experiment with LSD had the opportunity to try it, but with an approval from an LSD therapist and consumed in a medical establishment.

In Portugal, the use of psychedelics is not considered to be a criminal offense for the past decade. Excessive users are provided by psychological counseling, which aims to reveal addiction problems and offer rehabilitation to the ones in need. Today much data proves that the level of addiction is lower than twelve years ago. However, the consumption of psychedelics is still a taboo in Portugal due to the government that does not support or encourage the use.

There are no widely accepted pharmaceuticals treatments that are considered to be a tool to combat drug craving. However, some researches already show that a higher dosage of Iboga can be a treatment for drug addiction. It reduces withdrawal symptoms and craving for the substance to a very low level. Animal studies have shown that the self-administration drug had decreased after the treatment with the psychedelic. According to a study of the American Academy of Addiction Psychiatry, out of thirty-three people, who were treated with Iboga for opioid dependence showed that 88% quit the usage completely, after a single usage of Ibogaine (Website 24, 1999). However, Iboga is harmful to a person who has liver problems or several other conditions and, in these conditions, the use can be fatal. As the law is against the use of Iboga, those in need are forced to find underground places where there is no medical assistance, which would be indispensable for a safe treatment.

The efficiency of Ayahuasca use and its benefit on mental health and capability to solve addiction issues is not yet scientifically proven, as it is categorized as Schedule I substance in

most countries. In contrary, Brazil founded an organization that let prisoners drink Ayahuasca (Website 22, 2015). In Brazil, the prisoners who return to the society become a part of a nonvalued, marginalized social group as the Brazilian society encourages a tougher prison life than in many other countries. Euza Beloti, a psychologist revealed its negative effect on the inmate's` personality, which led to an incapability to fit in and made them even more violent than they were before the prison. Luiz Marques, an economist founded Acuda, an organization that provides a safe and highly controlled place where it is possible to take Ayahuasca treatment for prisoners. It turned out to be a great therapeutic potential. The session allows them to make realizations about right or wrong and in many cases through the use of Ayahuasca, they were given the chance to beg for forgiveness to their victims. They are given optimal conditions and a chance to be in a place where they feel acceptance. A prisoner reflected on the above mentioned in the following way: "We are considered the trash of Brazil, but this place accepts us," said Darci Altair Santos da Silva, 43, a construction worker serving a 13-year sentence for sexual abuse of a child under 14. "I know what I did was very cruel. The tea helped me reflect on this fact, on the possibility that one day I can find redemption." (Website 22, 2015).

Mushrooms are known to reduce the symptoms of different mental disorder symptoms such as obsessive-compulsive disorder (OCD) and clinical depression (Gale Encyclopedia of Medicine, 2008). Although these benefits have been backed up by different studies (John Hopkins, School of Medicine), Psilocybin Mushrooms are still banned in most of the countries in Europe, North America, and Australia and are not recognized for their therapeutic abilities.

As a conclusion for the above, if carefully regulated markets were provided like in some states in the United States and Amsterdam, the black market would decrease and the population could safely benefit from the use of psychedelics. The drug decriminalization would provide numerous benefits for societies. Short and long-term experiments proved the efficiency of psychedelics in reaching an expanded consciousness, also in improving mental health problems and reducing addiction problems. Hence, the Acuda prison project, using Ayahuasca in Brazil, Stanislav Grof's experimentation with treating mentally disordered patients or

Timothy Leary's Psilocybin experiment at a prison in Concord with the same purposes, should be taken as scientific evidence on the benefit of psychedelic use. If governments provided safe and controlled circumstances, it would enable collecting data for researches about psychedelics and people would have a better insight into the benefit of these substances in the therapeutic context. Subjective evidence and scientific experimentations showed that psychedelics can be used as a tool to make individuals less destructive. In addition, addiction problems can be reduced. After going through the above examples, we can conclude that the most important factor in a healthy use of psychedelics is a government that provides optional, controlled and secured circumstances for the user.

# 6. Conclusion

We have learned that psychedelic substances have been used throughout cultures for thousands of years, from the deserts to the jungles. Psychedelics have been used as a tool to access the psychedelic experience, which has been considered as mind-altering and spiritual awakening. For some tribes and cults the psychedelic experience plays a central role in their spiritual beliefs and rituals. Through our use of Leary's definition of the experience we have learned that the set and setting has a big influence on the development of the experience. Our research on cultural use showed us how different tribes prepare for the ceremony. Strong symbolic reference to ego-release and to rebirth, reminds the initiate what they are going through. In order to enhance the experience, the users have to let go of the ego through the first Bardo in order to enter the second Bardo, where the hallucinations and revelations start. These revelations often depict divine, spiritual or heroic figures according to cultural and social constructions. By using a phenomenological approach to the different accounts of the psychedelic experience, we have discovered that even though the experience is considered to be subjective, the cognitive changes often affect society. Our analysis and discussion indicate that the cognitive changes in Western society are often harder for the user to obtain, due to the amount of unnecessary data that fill our minds. It is shown that for some cultures, the consumption of a psychedelic is used as a connection to other dimensions, in order to receive visions useful for the user and the rest of the tribe. The acceptance of other dimensions and the release of their ego seem to be essential for the Bwiti, in order to get accepted as a Baanzi. Our discussion leads us to the possible benefits of psychedelics for Western society such as leading us to live a less materialistic life, less influenced by media and to help us better align our lives with nature. Our analysis also showed us the medical and therapeutical benefits of psychedelics, curing different addictions and health problems. Even though psychedelics are not proved to do any harm to the user, they are still illegal in most Western countries where the use and experience have the status of a taboo. Instead of embracing the individual's journey of personal development, we put people behind bars and label them as criminals.

# Suggestions for further research

Looking at the Western world, we recommend looking at the drug policies of Portugal and the Netherlands, who are still within the UN drug convention system, but are fighting addiction and overdose deaths successfully. The Netherlands are even using psychedelics for medical purposes. But then, why are psychedelics such a big taboo in other Western countries? Perhaps it is also interesting to take a look at countries where one of the severe addictions of opiates is successfully treated with Iboga. We also recommend examining the war on drugs. Why did it happen, how did it happen, who was/is benefiting from it and whether it is really successful or not. To gain a better understanding and first-hand experience in the tribal use, we recommend visiting shamans and tribes in Africa or South America, who provide, anyone willing to pay, with a psychedelic ritual. From a scientific perspective, it might be interesting to look at the role DMT plays in the brain. Why do we have DMT in our brain? Could it be the reason why some people have a psychedelic experience, without the use of psychedelics?

# 7. Bibliography

# Literature

<u>Samorini G.</u>, The Initiation Rite in the Bwiti Religion (Ndea Narizanga Sect, Gabon), Jahrbuch für Ethnomedizine, vol. 6-7, 1997–98,

<u>Pinchbeck, Daniel</u>: Breaking open the head; A Psychedelic Journey Into the Heart of Contemporary Shamanism, 2002.

Sharer, Robert and Loa, P. Traxler: The Ancient Maya 6th edition, 2006

Fernandes, James, W: An Ethnography of the Religious Imagination in Africa, 1982

Merlin, M D.: "Archaeological Evidence for the Tradition of Psychoactive Plant Use in the Old World", Economic Botany 57, 2003.

<u>Jeremy Narby,:</u> The Cosmic Serpent: DNA and the Origins of Knowledge, 1998

Alan Watts: The Joyous Cosmology: Adventures in the Chemistry of Consciousness, 1962

<u>Al-Zahrāwī, Abū al-Qāsim Khalaf ibn 'Abbās;</u> Studies, Gustave E. von Grunebaum Center for Near Eastern (1973). Albucasis on surgery and instruments. University of California Press.

Schultes R E and A Hofmann: Plants of the Gods (Rochester, VT: Inner Traditions) 1992.

<u>Giorgio Samorini</u>: Originally published in Integration, 5: p.105-114: The Bwiti Religion and the psychoactive plant Tabernanthe Iboga (Equatorial Africa)

http://ibogaine.mindvox.com/articles/bwiti-religion/ (Last accesed at 4th October 2016)

Swiderski, S: La religion Bouiti, V vols, Ottawa, Legas, 1990-1991

Huxley, Aldous, Doors of perception, Heaven and hell. 1954

Huxley, Aldous, Island, 1962

<u>Straussman, Rick:</u> DMT - The spirit molecule; A Doctor's Revolutionary Research into the Biology of Near-Death and Mystical Experiences, 2001.

Ram Dass; Be here now, 1971

Grof, Stanislav: Realms of the Unconscious: Observations from LSD Research, 1975

Grof, Stanislav: Beyond the brain: Birth, death, and transcendence in psychotherapy, 1985

Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G.: The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of mental health and well-being. Psychological Medicine, 33(2), 357–362. (2003)

<u>Novak J., Steven:</u> LSD before Leary: Sidney Cohen's Critique of 1950s Psychedelic Drug Research", *Isis*, Vol. 88, No. 1 pp. 87-110

<u>Anderson E. Peyote:</u> the Divine Cactus. University of Arizona Press. 1996.

<u>Guzmán, G.; Allen, J.W.; Gartz, J.:</u> "A worldwide geographical distribution of the neurotropic fungi, an analysis and discussion" (2000)

http://www.museocivico.rovereto.tn.it/UploadDocs/104 art09-Guzman%20&%20C.pdf (Last accessed on 4<sup>th</sup> October 2016)

Laurie J. Fundukian: The Gale Encyclopedia of Medicine. Gale Group 2008

<u>Dorothy Swaine Thomas:</u> The child in America; behaviour problems and programs. A.A. Knopf, New York 1928

# Journal of Ethnopharmacology

http://www.sciencedirect.com/science/journal/03788741/110 (Last accessed on 4th October 2016)

<u>Timothy Leary, Richard Alpert, Ralph Metzner</u>: The Psychedelic Experience: a Manual Based on the Tibetan Book of Dead, 1964

http://www.leary.ru/download/leary/Timothy%20Leary%20-%20The%20Tibetan%20Book%20Of%20The%20Dead.pdf (Last accessed on 4<sup>th</sup> October 2016)

# Websites:

#### Website 1

Dreamer, Dictionary.com, 2016

http://www.dictionary.com/browse/dreamer (Last seen: 3 December 2016)

# Website 2

Phenomenon, Dictionary.com, 2016

http://www.dictionary.com/browse/phenomenon (Last seen: 28 November 2016)

# Website 3

Meet Mother Ayahuasca, Sciencenotes.ucsc.edu, 2011

http://sciencenotes.ucsc.edu/2011/pages/ayahuasca/ayahuasca.html (Last seen: 11 November 2016)

# Website 4

Ibogaineclinic.com, 2016

http://ibogaineclinic.com/ (Last seen: 8 November 2016)

#### Website 5

Excorsisme med moder Ayahuasca, psychedelia.dk, 2016

https://www.psychedelia.dk/forum/viewtopic.php?f=46&t=52618 (Last seen: 1 December 2016)

#### Website 6

Mushrooms, Thegooddrugsguide.com, 2016

http://www.thegooddrugsguide.com/mushrooms/effects.htm (Last seen: 1 December 2016)

#### Website 7

Timothy Leary, Psychology.fas.harvard.edu, 2016

http://psychology.fas.harvard.edu/people/timothy-leary (Last seen: 1 December 2016)

# Website 8

Reflections on the Concord Prison Project and the Follow-up Study, web.archive.org, 1998

https://web.archive.org/web/20140105121134/http://www.maps.org/research/ralphmetzne r concord follow-up.pdf (Last seen: 1 December 2016)

#### Website 9

Serotonin and Hallucinogens, nature.com, 1998

http://www.nature.com/npp/journal/v21/n1s/full/1395318a.html (Last seen: 7 December 2016)

#### Website 10

The Spirituality of Psychedelic Drug Users, psychologytoday.com, 2012

https://www.psychologytoday.com/blog/unique-everybody-else/201212/the-spirituality-psychedelic-drug-users (Last seen: 7 December 2016)

# Website 11

LSD-Assisted Psychotherapy, www.maps.org, 2016

www.maps.org (Last seen: 7 December 2016)

# Website 12

The Huichol Indians, Shamanism.com

https://www.shamanism.com/huichol-indians (Last seen: 11 November 2016)

#### Website 13

The Huichol Indians, Shamanism.com, 2016

https://www.shamanism.com/huichol-indians (Last seen: 11 November 2016)

# Website 14

Are Psychedelics Addictive?, Psychedelictimes.com, 2016

http://psychedelictimes.com/psychedelic-therapy/are-psychedelics-addictive/ (Last seen: 7 December 2016)

#### Website 15

Psychedelics: entering a new age of addiction therapy, pharmaceutical-journal.com, 2014

http://www.pharmaceutical-journal.com/news-and-analysis/feature/psychedelics-entering-a-new-age-of-addiction-therapy/20066899.article (Last seen: 7 December 2016)

### Website 16

The Psychedelic Experience, Ben Goertzel, 1996

http://goertzel.org/books/spirit/uni7.htm (Last seen: 14 December 2016)

# Website 17

Ibogaine - Rite of Passage, A Cure for All Addictions, 2012.

https://www.youtube.com/watch?v=khhsboVsyrw (Last seen: 14 December 2016)

# Website 18

Materialism, Thesaurus.com, 2016.

http://www.thesaurus.com/browse/materialism (Last seen: 16 December 2016)

# Website 19

A Simple Guide to Life, Robert Bogoda, 1996.

http://www.accesstoinsight.org/lib/authors/bogoda/wheel397.html (Last seen: 16 December 2016)

#### Website 20

The Five Precepts, Dr. Paul Dahlke, Bhikkhu Sīlācāra, L.R. Oates, and G. Constant Lounsbery, 1996.

http://www.bps.lk/olib/wh/wh055.pdf (Last seen: 16 December 2016)

### Website 21

Religious Aspects of Psychedelic Drugs, Walter Houston Clark, 1968

http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=2829&context=calif (Last seen: 16 December 2016)

#### Website 22

In Brazil, Some Inmates Get Therapy With Hallucinogenic Tea, nytimes.com, 2015

http://www.nytimes.com/2015/03/29/world/americas/a-hallucinogenic-tea-time-for-some-brazilian-prisoners.html (Last seen: 16 December 2016)

#### Website 23

Crisis Intervention in Situations Related to Unsupervised Use of Psychedelics, Stanislav Grof, 1994

http://www.psychedelic-library.org/grof2.htm (Last seen: 17 December 2016)

# Website 24

Treatment of Acute Opioid Withdrawal with Ibogaine, Alper, Lotsof, Frenken Luciano, Bastiaans, 1999

http://www.iceers.org/docs/science/iboga/Alper%20et%20al 1999 Acute Opiate Withdraw al.pdf (Last seen: 17 December 2016)

#### Website 25

The Spirit Molecule (DMT): An Endogenous Psychoactive, neurowissenschaft.wordpress.com, 2012

https://neurowissenschaft.wordpress.com/2012/03/12/the-spirit-molecule-dmt-an-endogenous-psychoactive/ (Last seen: 17 December 2016)

Erowid web links:
Psilocybin Mushroom:
Erowid 1
Psilocybin Mushroom, Erowid.org
https://www.erowid.org/plants/mushrooms/mushrooms basics.shtml (Last seen: 24
November 2016)
Erowid 2
LSD, Erowid.org
https://www.erowid.org/chemicals/lsd/lsd_basics.shtml (Last seen: 24 November 2016)
Peyote:
Erowid 3
Peyote, Erowid.org
https://www.erowid.org/plants/peyote/peyote_effects.shtml (Last seen: 24 November 2016)
Iboga:
Erowid 4
Ibogaine, Erowid.org

https://www.erowid.org/chemicals/ibogaine/ibogaine basics.shtml (Last seen: 1 December 2016)

Ayahuasca:

Erowid 5

Ayahusca, Erowid.org

https://www.erowid.org/chemicals/ayahuasca/ayahuasca basics.shtml (Last seen: 28 November 2016)

**Erowid** 

https://erowid.org/ (Last seen: 5 December 2016)

# Erowid users' experiences:

Erowid user 1: LSD, Erowid.org, 2016

https://erowid.org/experiences/exp.php?ID=109320 (Last seen: 15 November 2016)

Erowid user 2: LSD, Erowid.org, 2016

https://erowid.org/experiences/exp.php?ID=108950 (Last seen: 15 November 2016)

Erowid user 3: LSD, Erowid.org, 2016

https://erowid.org/experiences/exp.php?ID=105918 (Last seen: 15 November 2016)

Erowid user 4: LSD, Erowid.org, 2016

https://erowid.org/experiences/exp.php?ID=70216 (Last seen: 17 November 2016)

Erowid user 5: Psilocybin, Erowid.org, 2007

https://erowid.org/experiences/exp.php?ID=66467 (Last seen: 17 November 2016)

Erowid user 6: Psilocybin, Erowid.org, 2011

https://erowid.org/experiences/exp.php?ID=92172 (Last seen: 17 November 2016)

Erowid user 7: DMT, Erowid.org, 2016

https://erowid.org/experiences/exp.php?ID=103790 (Last seen: 17 November 2016)

Erowid user 8: LSD, Erowid.org, 2012

https://erowid.org/experiences/exp.php?ID=51631 (Last seen: 17 November 2016)

Erowid user 9: LSD & Psilocybin, Erowid.org, 2013

https://erowid.org/experiences/exp.php?ID=87058 (Last seen: 17 November 2016)

Erowid user 10: Psilocybin, Erowid.org, 2013

https://erowid.org/experiences/exp.php?ID=93784 (Last seen: 17 November 2016)

Erowid user 11: DMT, Erowid.org, 2010

https://www.erowid.org/experiences/exp.php?ID=86874 (Last seen: 29 November 2016)

Erowid user 12: Psilocybin, Erowid.org, 2007

https://erowid.org/experiences/exp.php?ID=66467 (Last seen: 2 December 2016)

Erowid user 13: DMT, Erowid.org, 2011

https://erowid.org/experiences/exp.php?ID=88358 (Last seen: 2 December 2016)

Erowid user 14: DMT & Mushrooms, Erowid.org, 2013

https://erowid.org/experiences/exp.php?ID=93315 (Last seen: 7 December 2016)

Erowid user 15: Mushrooms, Erowid.org, 2000

https://erowid.org/experiences/exp.php?ID=2079 (Last seen: 7 December 2016)

Erowid user 16: LSD, Erowid.org, 2003

https://erowid.org/experiences/exp.php?ID=15901 (Last seen: 7 December 2016)

Erowid user 17: Peyote, Erowid.org, 2011

https://www.erowid.org/experiences/exp.php?ID=72245 (Last seen: 13 December 2016)

Erowid user 18: DMT, Erowid.org, 2007

https://www.erowid.org/experiences/exp.php?ID=62835 (Last seen: 13 December 2016)

Erowid user 19: Mushrooms, Erowid.org, 2003

https://erowid.org/experiences/exp.php?ID=16970 (Last seen: 13 December 2016)

Erowid user 20: DMT, Erowid.org, 2016

https://erowid.org/experiences/exp.php?ID=106677 (Last seen: 13 December 2016)

Erowid user 21: DMT, Erowid.org, 2013

https://erowid.org/experiences/exp.php?ID=90269 (Last seen: 13 December 2016)

Erowid user 22: Peyote, Erowid.org, 2005

https://erowid.org/experiences/exp.php?ID=42614 (Last seen: 13 December 2016)

Erowid user 23: Peyote, Erowid.org, 2009

https://www.erowid.org/experiences/exp.php?ID=55601 (Last seen: 13 December 2016)

Erowid user 24: Ayahuasca, Erowid.org, 2002

https://www.erowid.org/experiences/exp.php?ID=16063 (Last seen: 13 December 2016)

Erowid user 25: DMT, Erowid.org, 2013

https://www.erowid.org/experiences/exp.php?ID=96629 (Last seen: 13 December 2016)

Erowid user 26: Ayahuasca, Erowid.org, 2016

(https://www.erowid.org/experiences/exp.php?ID=109100 (Last seen: 13 December 2016)

Erowid user 27: Iboga, Erowid.org, 2009

https://www.erowid.org/experiences/exp.php?ID=78160 (Last seen: 13 December 2016)

Erowid user 28: DMT, Erowid.org, 2013

https://www.erowid.org/experiences/exp.php?ID=92052 (Last seen: 13 December 2016)

Erowid user 29: DMT & LSD, Erowid.org, 2010

https://www.erowid.org/experiences/exp.php?ID=82837 (Last seen: 13 December 2016)

Erowid user 30: Ayahuasca, Erowid.org, 2010

https://www.erowid.org/experiences/exp.php?ID=83237 (Last seen: 13 December 2016)

Erowid user 31: LSD, Erowid.org, 2012

https://www.erowid.org/experiences/exp.php?ID=82774 (Last seen: 13 December 2016)

Erowid user 32: DMT, Erowid.org, 2009

https://www.erowid.org/experiences/exp.php?ID=73400 (Last seen: 13 December 2016)

Erowid user 33: LSD, Erowid.org, 2010

https://www.erowid.org/experiences/exp.php?ID=81564 (Last seen: 14 December 2016)

Erowid user 34: Ayahuasca, Erowid.org, 2012

https://www.erowid.org/experiences/exp.php?ID=91566 (Last seen: 14 December 2016)