The Consumption of Psychoactive Plants During Religious Rituals: The Roots of Common Symbols and Figures in Religions and Myths

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ABSTRACT

Psychoactive plants which contain hallucinogenic molecules that induce a form of altered states of consciousness (H-ASC) have been widely used during the religious rituals of many cultures throughout the centuries, while the consumption of these plants for spiritual and religious purposes is as old as human history. Some of those cultures were shaman and pagan subcultures; African native religions; Bwiti Cult; South American native religions; Amazon Cultures; Central American Cultures; Mexican subcultures; Aztec, Maya and Inca; Wiccan and witch subcultures; Satanists; American Indians; Greek and Hellenistic cultures; Sufis; Hassan Sabbah's Hashissins; Hindu, Indian and Tibetan cultures; some of the Nordic subcultures etc. Some of the psychoactive ingredients of the plants that were used during these religious rituals were; narcotic analgesics (*opium*), THC (*cannabis*), psilocybin (*magic mushrooms*), mescaline (*peyote*), *ibogaine* (*Tabernanthe iboga*), DMT (*Ayahuasca and phalaris species*), *Peganum harmala*, *bufotenin*, muscimol (*Amanita muscaria*), *thujone* (*absinthe, Arthemisia absinthium*), ephedra, mandragora, star lotus, *Salvia divinorum* etc. The main purposes of the practice of these plants were: spiritual healing; to contact with spirits; to contact with the souls of ancestors; to reach enlightenment (Nirvana or Satori); to become a master shaman, pagan or witch; to reach so-called-other realities, etc. Such "psychedelic-philosophical plant rituals" changed participating persons' psychology, philosophy and personality to a great degree. In these two successive articles, the consumption of psychedelic plants during religious rituals is reviewed and it is hypothesized that the images, figures, illusions and hallucinations experienced during these "*plant trips*" had a great impact on the formation and creation of many figures, characters, creatures, archetype images that exist not only in the mythology, but also in many religions, as well, such as angels, demons, Satan, mythological creatures, gods, goddesses etc. In the Middle East and Anatolia, within many hermetic and pagan religions, Greek and Hellenic cultures psychoactive plant use was a serious part of the religious rituals, such as Dionysian rituals or Witch's' Sabbaths. Although the impact of the "psychedelic experience and imagination" was enormous to the configuration of many religious and mythological characters, and archetypes, this fact has been underestimated and even unnoticed by many historians and anthropologists, because of the quasi-ethical trends of "*anti-drug-brain-washed Western Societies*".

Key Words: psychoactive plant, entoptic, phosphene, religious ritual, opium, THC, Cannabis, DMT, ayahuasca, *Peganum harmala*, phalaris, magic mushroom, psilocybin, peyote, mescaline, ibogaine, thujone, *Arthemisia absinthium*, *Salvia divinorum*, Dionysian ritual, mandragora

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Introduction

During the last decades, accumulating archeological and anthropological evidence has rendered it clear that many ancient religious rituals had some other spiritual aspects related to psychoactive plants which were consumed during those rites, other than the known classical features of these rituals; psychoactive plants, which induce a certain form of altered states of consciousness (H-ASC) have been used for various spiritual purposes (Lewis-Williams, 1988, 1996, 1998, 2005; Febregas, 2010; Jean-Franchois, 2012; Bravo, 1989; Harner, 1973; Stafford, 1978; Metzner, 1998, 2002; Sayin, 2012a; Popik, 1995; Sheppard, 1998; Ruck, 2006, 2009; Akers, 2011; Merlin, 2003; Miller, 2013). Most of the shamanic and pagan cultures used those plants for different intentions such as:

- To establish contact with spirits and the spiritual world (*psilocybin, mescaline, ibogaine, Ayahuasca-DMT* etc.).
- To contact the souls of ancestors to get philosophical advice (particularly *ibogaine* and *Ayahuasca-DMT* etc.).
- To ponder deeply religious and philosophical subjects related to their tribe and/or society (*Cannabis, psilocybin, mescaline, Artemisia absinthium*, etc.).
- To establish contact with gods and goddesses (*Artemisia absinthium, ibogaine* etc.)
- To attain magical and supernatural powers (particularly shamans and witches).
- To heal psychologically *'diseased'* patients (many shamanic psychoactive plants).
- To gain healing powers and to attain medical treatments by various methods after reaching another form of consciousness (many shamanic psychoactive plants).
- To use it for medical purposes after attaining a different form of consciousness and vision.
- To reach a form of so-called enlightenment (Nirvana-Satori) (*ibogaine, psilocybin, mescaline, Cannabis, Ayahuasca-DMT*).
- To unravel some unknown facts and realms of the human mind and subconscious. (*psilocybin, cannabis, salvia divinorum, mescaline, ibogaine, morning glory seeds, blue star lotus, opium, Artemisia absinthium, Ayahuasca brew, DMT-containing plants with P. Harmala,* etc.)
- To become a master shaman or a master pagan (*numerous psychoactive plants used in shamanic trance states and rituals*).
- Aphrodisiac effects during the rituals and/or *ORGIA* (*Cannabis, Artemisia absinthium, ibogaine etc.)*

Whether psychoactive plants and substances fulfill any of the above purposes is very obscure, unlikely and questionable, but evaluating such a statement and debunking the ancient shamanic psychopharmacological methods is *not* the subject of this article. The important point is that psychedelic (mind-expanding) plants, which are, *today,* totally banned in most of the regions of the globe, were actually an important part of the ancient religious rituals; and ASCs induced by these herbs and plants were essential to fulfill those religious purposes while most of them were used as medicines (Harner, 1973; Metzner, 1998, 2002; Nichols, 2004; Blainey, 2005; Stafford, 1978; Schultz, 1992; Ruck, 2000, 2001, 2006a-b, 2008 2009, 2013 ; Merlin, 2003; Miller, 2013; Diaz, 2010; Sayin, 2012a) .

According to Carl Gustav Jung, a common collective unconscious existed in many different cultures that had no contact with each other and had lived in different centuries; the common symbols, that are called "*the archetypal images*," such as the *swastika*, may have been used by many different cultures (Jung, 1968). Jung proposed some common images and symbols in his famous book "*Man and His Symbols*," as evidence of this common collective unconscious; however, any proposed mechanisms for how such a common language of the sub- or unconscious was constructed and concerted, until recently, have not been revealed. Some of the works of Ruck, Lewis-Williams and Kent, today, have raised some insights to explain how these common language items, common archetypes and similar symbols were used in different cultures around the globe that lived very distinctly from each other and used totally different languages, and more importantly, which had no cultural contact and communication because of the distance between them and the eras in which they lived (Lewis-Williams, 1998, 2005; Kent, 2010; Harner, 1973; Schultes, 1992; Bravo, 1989; Akers, 2011; Ruck, 2001, 2006a-b, 2008, 2009,

2013). Carl Ruck *et al.*, also have interesting claims and hypothesis about the effects and hidden symbolic meanings of psychoactive plants on the formation of some folkloric common fairy tales of many different cultures; including *Snow White*, a famous European tale, which exists in nearly all European nations, first collected and recorded by the Brothers Grimm (Ruck, 2006, 2009).

The main hypotheses of this article are:

- Many ancient cultures used some kind of psychoactive plants during some of their religious rites since the Neolithic Ages.
- Most of the mythological figures and characters that exist in tribal religions, in ancient religions and also in the institutionalized modern religions, such as demons, angels, Satan, semi-human animals, gods, goddesses, spirits, ghosts and many others originate from the illusions and hallucinations of ancient "ritual people" in Psychedelic Religious Rites (PRR) who had used psychoactive plants during their religious rituals and who had been very 'high' on psychedelic plants.

Evidence for Psychoactive Plant Use in Psychedelic Religious Rituals (PRR) in the Amazon and South America

The native cultures of the Amazon do not have a written history and they pass on their ancestral sacred knowledge through unwritten legends, articulated by the elderly to younger generations; thus we do not know exactly when and how the rituals utilizing psychoactive plants in Amazonia originated; but it is certain that the brew called *Ayahuasca* was the fundamental sacrament used by the people of the Amazon region. It is traditionally used currently in Venezuela, Colombia, Ecuador, Peru, Bolivia and Brazil (Febregas, 2010; Desmarchelier, 1996; Gable, 2007; Krippner, 2011; Trichter, 2009).

According to a common indigenous legend, the knowledge of *Ayahuasca* had been 'divulged' to certain shamans in their dreams or through ASCs induced by other psychotropic plants; additionally, it was told to them by the – so called— *spirits* of the plants. Gayle Highpine reported that the shamans learned how to use and brew *Ayahuasca* by trial and error, as they brew the *B. Caapi* vine with many other plants, until finding the optimal psychoactive effects (Highpine, 2009). Highpine notes that the name *Ayahuasca* comes from the Napo Runa people of the upper Amazon. Napo Runa medicine men call the *B. Caapi* vine and the brew as *Ayahuasca* and have a tradition of mixing the *B. Caapi* vine with other plants to observe the combined effects. According to Gayle Highpine, after some time of trial and error, the shamans might have come to the conclusion that certain plants caused more psychoactive effects after administering it with *Ayahuasca* (*B. Caapi*) to acquire enhanced monoamine oxidase (MAO) inhibition effect on the central nervous system.

As a tradition in the Amazon region, DMT-containing plants, such as *Sychotria viridis* (*Chacruna*) – leaves, *Diplopterys cabrerana* (*Chaliponga*, *Banisteriopsis rusbyana*) – leaves, *Psychotria carthagenensis*, are used with some other brews of vines or weeds, that act as a MAO inhibitor on the central nervous system, since the MAO enzyme, found abundantly in the body, degrades DMT very quickly; without MAO inhibiting other "magical brews," the DMT containing Amazonian plants have no psychoactive effect, since DMT would be metabolized in the digestive system very quickly (Highpine, 2009; Gable, 2007; Febregas, 2010; Stafford, 1978). Those additional "witch brews" are the harmala alkaloids that are MAO-inhibiting beta-carbolines. The three most studied harmala alkaloids in the *B. caapi* vine are *harmine*, *harmaline* and *tetrahydroharmine*. *Harmine* and *harmaline* are selective and reversible inhibitors of MAO-A, while tetrahydroharmine is a weak serotonin reuptake inhibitor (SRI) (Callaway, 1999). This inhibition of MAO-A allows DMT to diffuse, as not metabolized, through the membranes in the stomach and small intestine, and eventually cross the blood–brain barrier to activate some certain receptor sites, such as 5-HT receptors, in the brain.

Whatever the origins might have been, *Ayahuasca* has always played a central role in the magico-religious life of the Amazon; and not only for the indigenous people but also for Westerners, today, has *Ayahuasca* started to play a very important role. Today many Westerners are flooding to the region solely for experiencing *Ayahuasca* ceremonies. It is estimated that twenty percent of the tourists visiting the city of Iquitos and Pucallpa in Peru, today are coming to ingest the brew. Many

places like Iquitos and Pucallpa have become very popular destinations and the number of places that offer *Ayahuasca* ceremonies has increased gradually during the last decades (personal communication with Levent Kartal, 2007-2013, experiences in Pucallpa- Iquitos-Cusco/Peru/Colombia and Brazil).

Traditionally, *Ayahuasca* is not used for recreational purposes; on the contrary, it has acquired fame as "*La Medicina*", the medicine. There are certain rules that the *Ayahuasca* ceremony participants should adhere to and it is almost always ingested at night with an "experienced guide" (*curandero,* shaman, healer, *ayahuasquero*), communally and sometimes individually. During the four hour journey into the inner space of the consciousness, there are usually one or more shamans who will also drink the brew, while singing sacred healing songs called *Icaros*. The type of the *Icaros* sung may vary from region to region. For example, the *Icaros* sang by the *Shipibo* has a very distinct character with its whiffling and whistling, which an experienced person can easily differentiate. According to tradition, they are said to be passed from generation to generation and are to be sung for healing or protection (personal communication with Levent Kartal, 2007-2013, experiences in Pucallpa- Iquitos-Cusco/Peru/Colombia and Brazil).

Vomiting is a very common occurrence in *Ayahuasca* ceremonies. Although the purgation can be an uncomfortable experience for some participants, traditionally it is usually interpreted as a positive effect of the brew and considered a cleansing; thus the participants are told not to inhibit the urge to vomit; and usually after vomiting, a sense of serenity arises. After drinking the brew with the *blessing* of the Shaman, the participants return back to their spaces waiting for the effects to commence. Absolute silence is usually expected during the 30-45 minutes before the journey starts. People can light a *mapacho* (tobacco rolled cigarette) or their tobacco filled pipe while waiting or listening to the sounds of the jungle with its myriad of creatures. Due to the MAO inhibiting effect of the tobacco smoking, it may enhance the psychoactive after-effects of the brew, after the experience starts to subside. During the journey, the shamans may personally pay special attention to people who might be having difficulties. They can sing specific *Icaros*, lay on hands to heal, burn incense, or blow tobacco smoke, which is very common in *Ayahuasca* ceremonies. Although the character of the ceremonies may vary from region to region, this is the general unfolding of a traditional *Ayahuasca* ceremony in the Amazon region. The plants used for cooking the brew may also differ. For example, *Diplopterys cabrerana*, which came to Iquitos from Colombia recently, is not as widely used in Iquitos as it is in Colombia; and not all shamans use the *datura* in their brews. Sometimes the participants in the ceremony may not drink the brew him/herself and just participate passively. And the music of the ceremonies may vary, sometimes accompanied by communal dances such as those in the Santo Daime Church in Brazil. The experiences of the participants in the rituals also may vary; but the –so called- *positive effects* of *Ayahuasca* have become one the interests of neuroscience research in the West. South America, and especially the Amazon rain forest, has become one of the new hubs for the revival of the study of the "*archaic entheogenic ASC*" (personal communication with Levent Kartal; Levent Kartal's *Ayahuasca* experiences, 2007-2013, Pucallpa-Iquitos-Cusco/Peru/Colombia.) (Febregas, 2010; Desmarchelier, 1996; Gable, 2007; Krippner, 2011; Trichter, 2009; Diaz, 2010).

The review of the literature showed that in the South American and Amazon cultures, psychoactive plant use, not only *Ayahuasca* but also others, was very common during religious rituals and other religious ceremonies for many centuries (Table-1A, 1B).

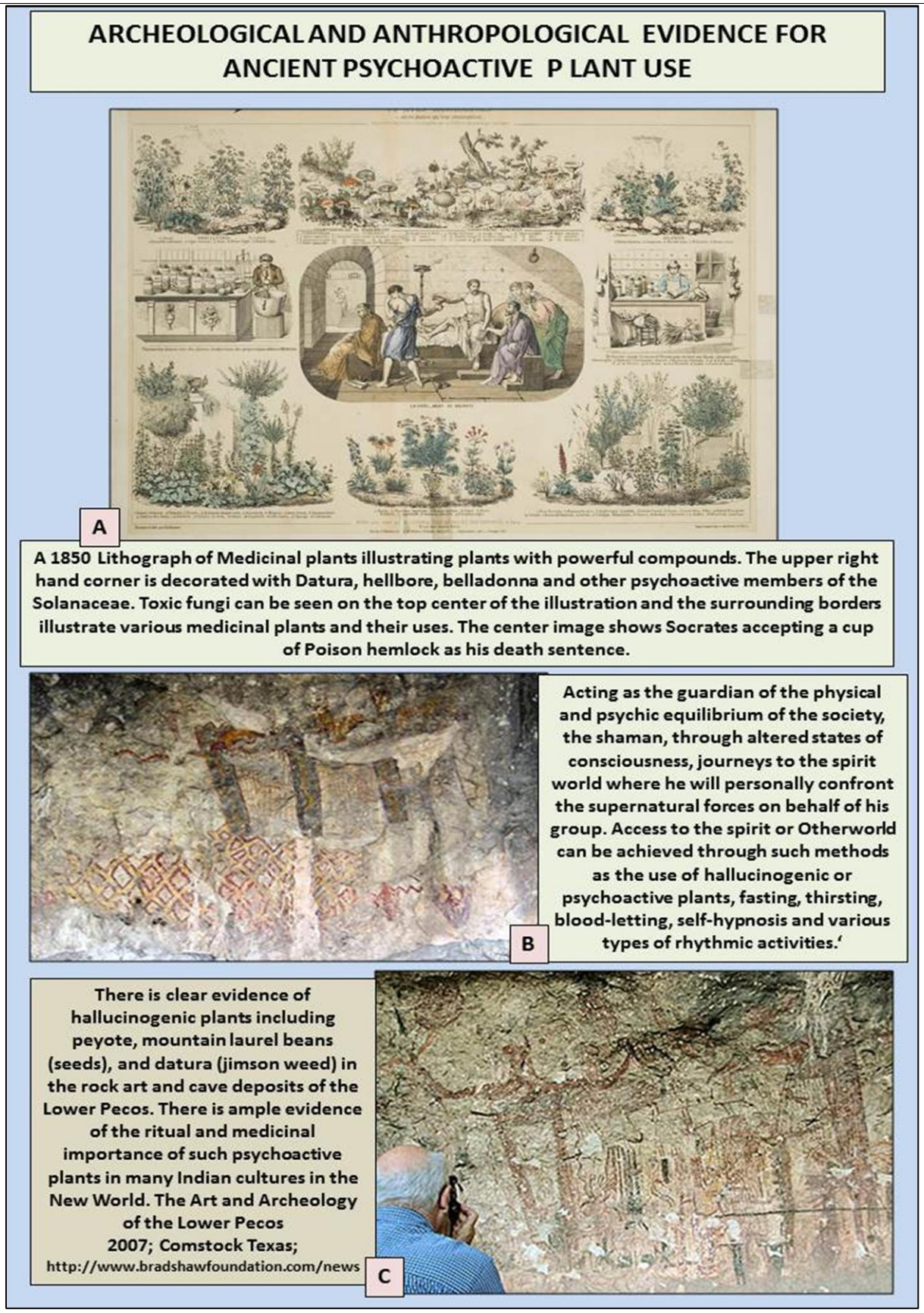


Figure 1. Archeological and anthropological evidences of psychoactive plant use in early historical times. A) An old lithograph about psychoactive plants published in 1850. B) Shaman's spiritual world during ASCs induced by psychoactive plants. Old cave drawings, Texas. C) Archeological evidence found in Los Pecos, Texas in 2007. There was clear evidence that the Neolithic cave drawings were made under the effects of Peyote (or jimson weed).

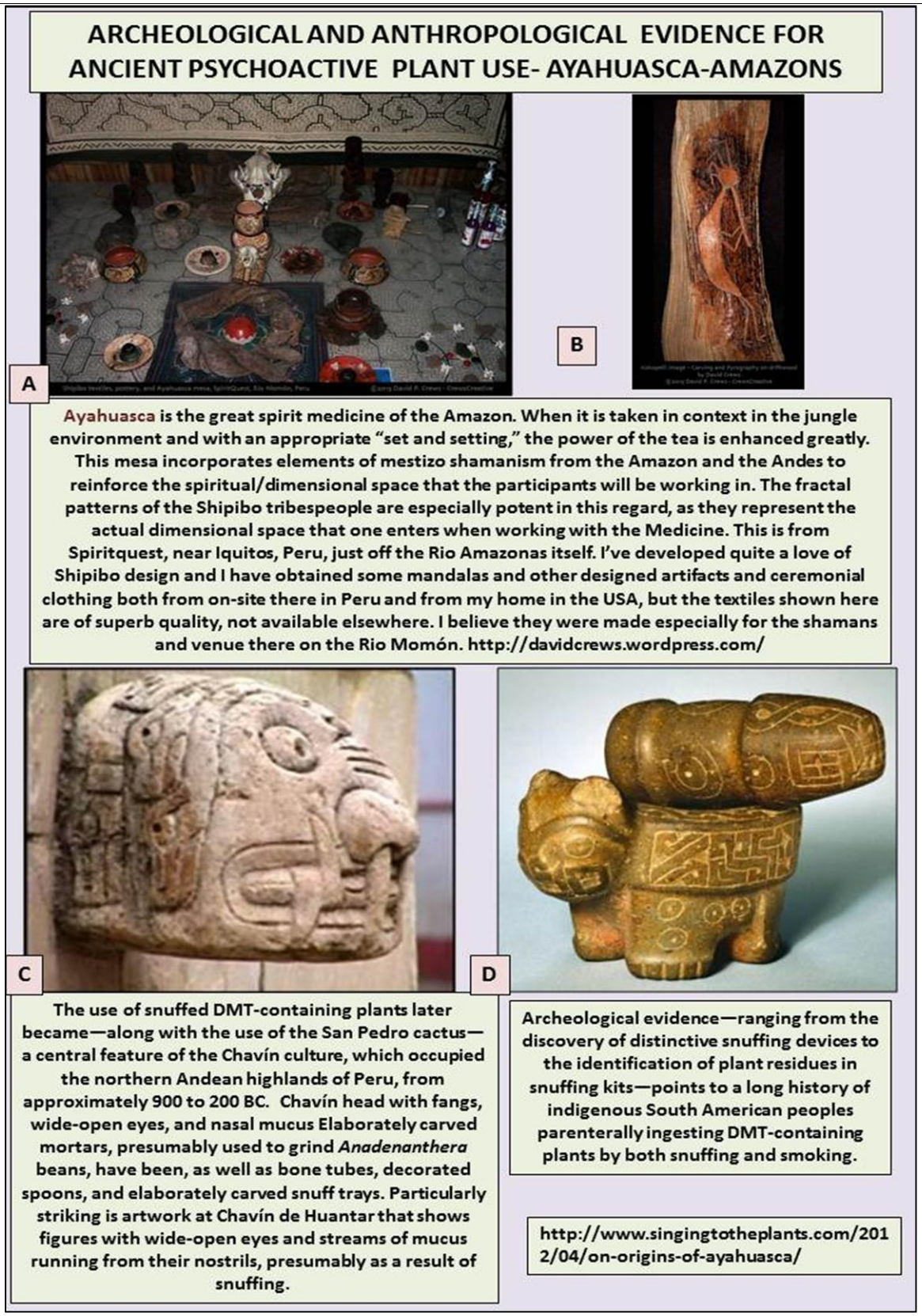


Figure 2. Psychoactive substance use in Amazons and *Ayahuasca,* DMT containing plant. A) Accessories of a traditional *Ayahuasca* ceremony. B) A Shamanic drawing belonging to his spiritual world. C) A Sculpture descending from 900 B.C. depicting the intranasal use of DMT, with fangs, wide open eyes and mucus running from the nostrils. Peru. D) Archeological evidence for psychoactive plant preparation kit. The tools have carved figures of entoptic images on them.

Other World-Wide Evidences for Psychoactive Plant Use in Religious Rituals

For the Old World, Merlin has reported that psychoactive plants (opium, *Cannabis*, *Ephedra*, *Blue Water Lily* (Star Lotus), *mandrake plant*, *Peganum harmala*) have been found in the archeological research associated with the religious rituals in many places, such as Egypt, Middle East, Mesopotamia, North Africa, various parts of Europe, China, and many parts of Asia, reaching back to Neolithic Ages (Merlin, 2003), and other investigators have confirmed similar findings (Dobkin, 1984; Lewis-Williams 1988, 2006, 2008, 2005; Metzner, 2002; Nichols, 2004; Ruck, 2006, 2009; Bravo, 1989; Akers, 2011). (Figures 3, 4; Table 1-A, B)

For the New World, also, many researchers have reported that *Cannabis, magic mushrooms, Ayahuasca*, DMT-containing plants, *peyote, coca* leaves, *Salvia divinorum*, *morning glory seeds*, various species of *lotus flowers*, *bufotenin*, and many other psychoactive plants were discovered to have been used in the religious and healing rituals, as archeological and anthropological evidences have pointed out (Harner, 1973; Stafford, 1978; La Barre, 1979; Wasson, 1980; Dobkin, 1974, 1984; Schultes, 1992;Davis, 1992; Desmarchelier, 1996; Metzner, 1998; Nichols, 2004; Blainey, 2005; Ruck, 2001, 2006, 2009, 2013; Rodrigues, 2006; Trichter, 2009; Fébregás, 2010; Krippner, 2011; Jean-Francois, 2012; Bouso, 2012; Miller, 2013). (Figures 1, 2; Table 1-A, B)

Use of *psilocybin* or *psilocin* containing psychoactive mushrooms (magic mushrooms) was wide spread in many religions in Europe and around the Middle East and Mesopotamia, where the appearance of magic mushrooms emerges from nearly all cultural and religious rituals, as depicted in the folkloric remains and art . In Persia (1500-1200 B.C.), the Sun-god Mithra wears a "liberty cap", *(Psilocybe semilanceata*) which is in the shape of a mushroom in most of the sculptures and reliefs, as well as the Sun-god Attis (Greece, 1200 B.C.) (Figures 3, 4). Also the appearance of *opium*, *Cannabis*, *Ephedra*, *Nymphaea nouchali* (water lily), *Mandragora officinarum* (mandrake plant), *Peganum harmala,* wormwood (*Artemisia absinthium*), and various kinds of hallucinogenic lotuses are very common in the reliefs and sculptures of the remains in most of the archeological findings (Ruck, 2001, 2006, 2009, 2013; Diaz, 2010; Nichols, 2004; Lewis-Williams, 2005; Akers, 2011; Metzner, 1998; Schultes, 1992; Merlin, 2003; Miller, 2013) (Figures 1, 2, 3, 4). Among these, use of *Peganum harmala* in Anatolia and the Middle East is of particular importance, because it is *not* a hallucinogenic plant; although, it might have been used for its anti-helmintic and anti-protozoal effects, it contains the beta-carbolines *harmine* (4.3 %), *harmaline* (5.6 %), *harmane* (0.16 %) that have MAO inhibiting effects. The evidence that *Peganum harmala* was also associated with "Shamanic Practices and Religious Rituals" can be a *proof* that many *Phalaris* species, that contain DMT, and are found abundantly in Anatolia and the Middle East, might have been used with *Peganum harmala* in those regions for shamanic and religious purposes, throughout hundreds of centuries, just like *Ayahuasca* to get more potent DMT-hallucinogenic effects (*B. Capii* vine and its use along with DMT-containing *Sychotria viridis, Diplopterys cabrerana, Psychotria carthagenensis* in the Amazons); (Figures 5, 11 and below for details). *Peganum harmala* (*Üzerlik otu, Nazar otu* in Turkish) is so widespread in Turkish, Anatolian and Middle East culture that its dried capsules are strung together and hung in homes or vehicles to protect against "the evil eye"; also *Peganum harmala* is burnt as an incense to get the Jinns (imaginary and superstitious ghostly unseen evil creatures, having a non-materialistic body) and evil eye away. *Peganum harmala* is widely used in the culture for luck, magic, and against evil in Iraq, İran, Syria, Afghanistan, Turkic Nations etc.

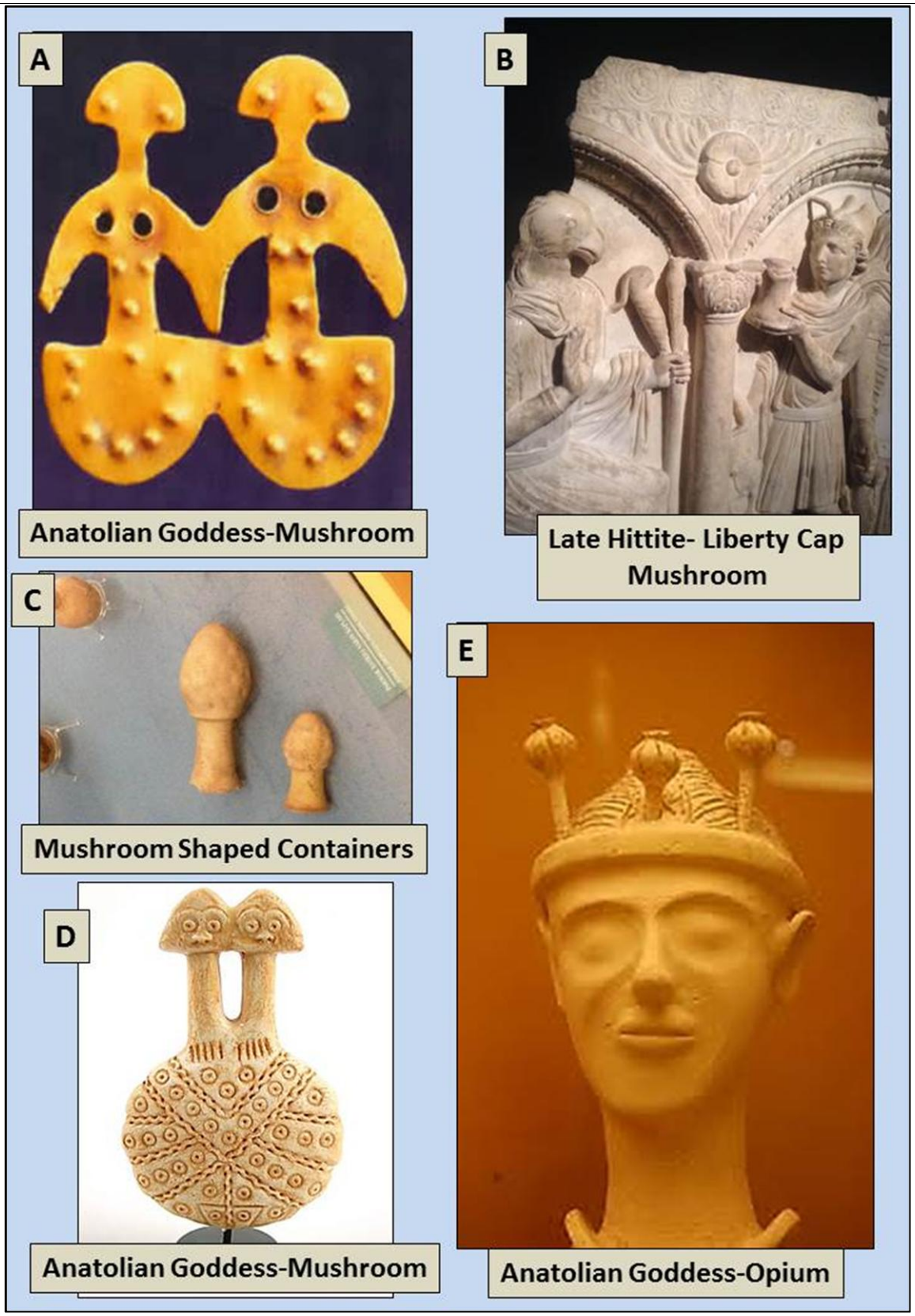


Figure 3. Archeological evidence of opium and magic mushrooms from the ancient Anatolian cultures. 1500-500 B.C.) Anatolian Goddess Figure with resemblance to magic mushrooms (Anatolian Civilizations Museum-Ankara-Turkey). B) Late Hittite (or Urartu) relief depicting the "Liberty Cap" and the magic mushrooms (İstanbul Archeological Museum-İstanbul-Turkey). C) Mushroom shaped containers (Anatolian Civilizations Museum-Ankara-Turkey). D) Anatolian Goddess sculpture depicting magic mushrooms (Anatolian Civilizations Museum-Ankara-Turkey). E) Anatolian Goddess sculpture with three opium plants (Anatolian Civilizations Museum-Ankara-Turkey).



Figure 4. Archeological evidence of magic mushrooms from ancient Anatolian cultures, 1500-500 B.C. A) A Cretan Goddess with opium from Anatolia region. B) Two headed Anatolian Goddess Figure depicting magic mushrooms (Anatolian Civilizations Museum-Ankara-Turkey). C) Various Goddess and magic mushroom sculptures from Anatolia. See the shape of 4 headed or 2 headed sculptures, the body of the magic mushrooms under the soil has always a circular unified bulk, from where the magic mushrooms emerge as separate mushrooms over the soil (Anatolian Civilizations Museum-Ankara-Turkey).

During the last decades, hundreds of archeological and anthropological items of evidence came out in Mexican, Maya and Aztec cultures that magic mushrooms (psilocybin), peyote (*Lophophora williamsii,* mescaline), cannabis (THC), and some other psychoactive plants were used during shamanic and religious rituals (Castaneda, 1985; La Barre, 1979; Stafford, 1978; Metzner, 2002; Miller, 2013; Ruck, 2009; Schultes, 1992; Blainey, 2005) There are over 20 different species of entheogenic mushrooms found in Mexico, so it is reasonable to make the connection between the known transcendental properties of psilocybin mushrooms and the use of mushroom altars in ritual consumption ceremonies (Blainey, 2005; Dobkin de Rios, 1974).

Rodrigues and Carlini, after two years of field research, reported that they could identify a total of 169 psychoactive plants which were utilized in the preparation of 345 local prescriptions for 68 ailments of the CNS, classified as tonics, analgesics, and memory enhancers, thought modifiers, tonics for the brain, anorectics, hallucinogens and anxiolytics (Rodrigues, 2006). Some of these psychoactive plants were said to descend from the ancestors, and most of them were used in both healing and religious rituals in the Brazilian culture for hundreds of centuries.

The possible use of toad toxins by the Mesoamerican cultures for psychoactive purposes has long been proposed. We know that the toad was recurrently depicted in Mesoamerican art (Kennedy, 1982), with the toad image forming the base of mushroom stones (Wasson, 1980). Many species of the toad genus *Bufo* have parotid glands that excrete the chemical 5-hydroxy-DMT, also called *bufotenine*. *Bufotenine* has a similar chemical structure with psilocin, and induces powerful hallucinations when administered by smoking while combined with some type of MAO inhibitor (Blainey, 2005).

Morning glory flower seeds (*Turbina corymbosa*), called *Ololiuqui* by the Aztecs, contain lysergic acid amide (LSA, similar to LSD). The LSA molecule is almost identical in structure to LSD, but not as potent as LSD; however when hundreds of seeds were ground into a powder, they would be blended into a cacao beverage, and sometimes psilocybin mushrooms were added to the mixture (Wasson, 1980). Even though the morning glory is found throughout Central America and the Caribbean, there is evidence that they were only purposely used for religious rituals in Mexico (Schultes & Hofmann, 1992; Blainey, 2005).

Another interesting hallucinogen *ibogaine* (*Tabernanthe iboga*), which induces a 48-hour-"*inner journey*", has been used in the religious rituals of the Bwiti cult by the shamans in Gabon, West Africa, for centuries (Stafford, 1978; Popik, 1995; Sayin, 2012a). The mechanism of the action of *ibogaine* is still obscure; it is assumed that it is a kappa opioid receptor agonist and NMDA receptor antagonist; however these effects cannot explain very different forms of the altered consciousness levels induced by *ibogaine*, including an *oneiropherenic* state, conscious dreaming and the auto-psychoanalysis of the

subconscious, experienced during the whole "trip".[2]

Ibogaine has been patented and also confirmed by NIDA to treat various forms of addiction or substance dependence, such as of heroin, cocaine, alcohol, tobacco, and methamphetamine (Popik, 1995; Alper, 1999; Maciulaitis, 2008; Sayin, 2012a). This is an interesting incident which also supplies supporting proof for the statement that most of the ancient shamanic cultures called and believed in the psychoactive plants as "healing medicine" for centuries, just as in the case of *ibogaine,* which has marvelous healing effects on the human psyche to affect one's personal psychology very deeply, treat abstinence syndromes and many forms of addictions.

Evidence for Psychoactive Plant Use in PRR in Greek-Hellenic Cultures and Anatolia

Dionysian Rituals, the Bacchae, Kykeon-Absinthe and Wormwood

More than 2000-2500 years ago, in Greece and Ionia (Aegean coast of Anatolia), during September, there was a tradition of very famous carnival-like rituals in the village called Eleusis. Some selected and high-class citizens were allowed to enter into these Eleusinian religious pagan festivals. These ceremonies continued for several days and very little is known about these rites today. The ritual was partially described in the 2nd century A.D.*: "... of all the divine things that exist among men, it is both the most awesome and the most luminous"* (Wasson, 1978). There had always been a rumor that men and women drank a very powerful "magical potion" during these rituals. Most probably, these rituals were the imitation of "Dionysian rituals" and the potion was some kind of psychoactive drink, such as absinthe (or *kykeon*) (Wasson, 1978; Nichols, 2004; Ruck, 2000, 2006, 2009; Azar, 2006; Daniélou, 1992; Sayin, 2014). There are even 13th-century secular love songs about these rituals, known as *Carmina Burana* ('Songs of Beuern,' 5 songs of morals and mockery, 131 love songs, 40 drinking and gaming songs, the most important collection of Goliard and vagabond songs, with obscene themes and satirical of the Church, of old Northern Europe culture; written in 1230) of which lyrics were used by Carl Orff to compose his famous work of the *Carmina Burana* in 1936 (Azar, 2006; Sayin 2014).

Very little is known about the ingredients of *kykeon or absinthe*, the famous high-alcoholic, aphrodisiac drink, which most probably induces mild hallucinations. Although there is very inconsistent information about the authentic absinthe, its main ingredients were aniseed (*Pimpinella anisum)*, ethyl alcohol, grape-juice wine, wormwood (*Artemisia absinthium*), a species of parsley (*Apiaceae petroselinum*), fennel (*Foeniculum vulgare*) and some other herbs. Its alcoholic concentration used to be as high as 45-74 %. This special drink was described as "a hallucinogenic-aphrodisiac potion" that was consumed during the long "Dionysian festivals and orgia". Its active hallucinogenic ingredient was probably *thujone (*in *Artemisia absinthium)*, a cannabinoid receptor agonist, while it might have also contained other psychoactive plants and herbs, such as magic mushrooms (Webster, 2000), ergot compounds and LSA (*kykeon*; Wasson, 1978; Ruck, 2000, 2001, 2013, 2006a-b, 2009), opium, etc. (Ritter, 2008; Gimpel, 2006; Lachenmeier, 2006a, 2006b; Azar, 2006; Daniélou, 1992; Sayin, 2014). It is interesting to note that another cannabinoid receptor agonist, cannabidiol, has recently been found to effectively control the disturbing dreams/nightmares - i.e., hallucinations during REM sleep--and associated abnormal parasomnia behaviors - viz. dream-enacting behaviors - emerging with REM sleep behavior disorder in patients with Parkinson's disease (Chagas, 2014; and personal communication with Carlos H. Schenck).

The contemporary alcoholic beverage *absinthe* (Green Fairy) was different from the Eleusinian. Absinthe originated in the canton of Neuchâtel in Switzerland in the late 18th century. It rose to great popularity as an alcoholic drink in late 19th- and early 20th-century France, particularly among Parisian artists and writers. Owing in part to its association with bohemian culture, the consumption of absinthe was opposed by social conservatives and prohibitionists and it was banned at the beginning of 20th Century. Ernest

[2] The phenomenon of "conscious dreaming" just mentioned has the formal contemporary designation of "lucid dreaming", and the objective study of sleep by means of polysomnography in lucid dreamers has documented the fascinating co-occurrence of the waking state within the rapid-eye-movement (REM) sleep state, as a distinct form of "dissociated state" in which the lucid dreamer can direct the dream action (LaBerge, 1990; Godwin, 1994; Mahowald, 1998; personal communication with Carlos H. Schenck).

Hemingway, Charles Baudelaire, Paul Verlaine, Arthur Rimbaud, Henri de Toulouse-Lautrec, Amedeo Modigliani, Picasso, Vincent van Gogh, Oscar Wilde, Aleister Crowley, Erik Satie and Alfred Jarry were all known absinthe drinkers.

Dionysian Rituals and Orgia

Dionysian rituals were a part of the pagan rites of the Greek-Hellenic-Roman-Anatolian Cultures, where Dionysus and his symbolic existence were worshipped. In Roman times, Dionysus' name changed to Bacchus. He may have been worshipped as early as 1500–1100 B.C. by Mycenaean Greeks; other traces of the Dionysian-type cult have been found in ancient Minoan Crete. He is a god of epiphany, "the god that comes," and his "foreignness" as an arriving outsider-god may be inherent and essential to his cults. His mother was a mortal virgin, Semele, the daughter of king Cadmus of Thebes, and his father was Zeus, the king of the gods. Dionysus (Dionysos, Iacchus, Bacchus) was the god of the grape harvest, wine making and wine, of ritual madness and ecstasy in Greek mythology; however, after investigating the philosophy of Dionysus and the real nature of Dionysian rituals-orgies, we can also add the attributes of "the god of altered states of consciousness (ASC) and sexual satisfaction and orgasm"; since the term "orgasm" also comes from *Dionysian orgia* (orgia, orgiasm, orgiasmus, orgasmus, orgasm) (Figure 5, 6, 7) (Daniélou, 1992; Azar, 2006; Sayin, 2014).

During the *orgia*, people danced, entertained, listened to music and drank wine. One of the most important details of these rituals, which the historians and anthropologists always ignored, is that the famous drink *kykeon* or, probably, *absinthe* was one of the main aphrodisiac agents in the magical potion that these dancing people drank during these festivals. Wasson, Hoffman and Ruck, hypothesized that *kykeon* contained ergot alkaloids (from *C. purpureae*) (Wasson, 1978; Ruck, 2008, 2013), however, others objected that *kykeon* contained psilocybin (Webster, 2000); most probably *kykeon* contained some psychoactive substances which could be LSA, psilocybin or DMT or some others. Sexual freedom and liberated sexual practices were also a part of the Dionysian Orgia, such that the term *orgy* comes from the *orgia* of the Dionysian Festivals (Figure 7). Theatre is also thought to originate from these rituals, where Greek tragedy or drama was occasionally performed.

Bacchae

The *Bacchae* were very beautiful magician-hypersexual-warrior women who served Dionysus, just like the satyrs. They carried a long magical stick (or magic wand) called a *thyrsus*, which had a pinecone tip. The warriors of Dionysus were always depicted with the *thyrsus*. *Bacchae* were able turn water into wine (as Jesus subsequently did with great frequency), or psychoactive drinks, heal many diseases, or give sexual potency to men and women by just touching with *thyrsus*. *Thyrsus* had many symbolic meanings in Dionysian teachings and philosophy (Figures 5, 6, 8, 9). During the Dionysus rituals, *Bacchae* danced, joined the entertaining people, and served wine and psychoactive drinks, such as *kykeon* or *absinthe*. Most of the *Bacchae* were insatiable and hypersexual-hyper orgasmic ESR women who joined the dances of the festival, as well as the long lasting sexual activities of the Dionysus Cult (Sayin, 2011, 2012a, 2012b, 2014; Euripides, B.C.; Azar, 2006; Daniélou, 1992; Ruck, 2000, 2001, 2006a-b, 2013).

Thyrsus

Thyrsus was a symbolic magical wand of the *Dion*ysus *Cult*, which, most probably, came to be known as "witch's brooms or magic wands" in the medieval ages. The important point is that the tip of the *thyrsus* was different in many drawings on ancient vases and the figures on the reliefs. Sometimes it was pinecone shaped; sometimes the tip resembled a type of magical or psychoactive plant, similar to wheat or *Phalaris* species, which contains DMT and is very hallucinogenic (Figures, 5, 6, 8, 9, 11). Could DMT have been used during the Dionysian Rituals?



Figure 5. Archeological and anthropological evidence that early Dionysus rituals consumed psychoactive plants and weeds. A) Contemporary advertisement graphic design of the alcoholic beverage Green Fairy, Absinthe. B) Label of French drink Absinthe. C) A contemporary poster for the drama of Bacchae by Euripides. D) 3 Bacchae from a contemporary play (Euripides) with grape leaves on their heads. E) Dionysus and Satyr paintings from an ancient Greek vase, holding Thyrsus. F) Bacchae from a contemporary play (Euripides). G) Dionysus, holding a Thyrsus on an ancient Greek vase. H) Dionysus and his hypersexual warriors, Bacchae, from an ancient Greek vase, preparing wine or the psychoactive magic potion for the Dionysus Festivals. I) Dionysus and, possibly, various magical (psychoactive plants) on an ancient Greek vase.

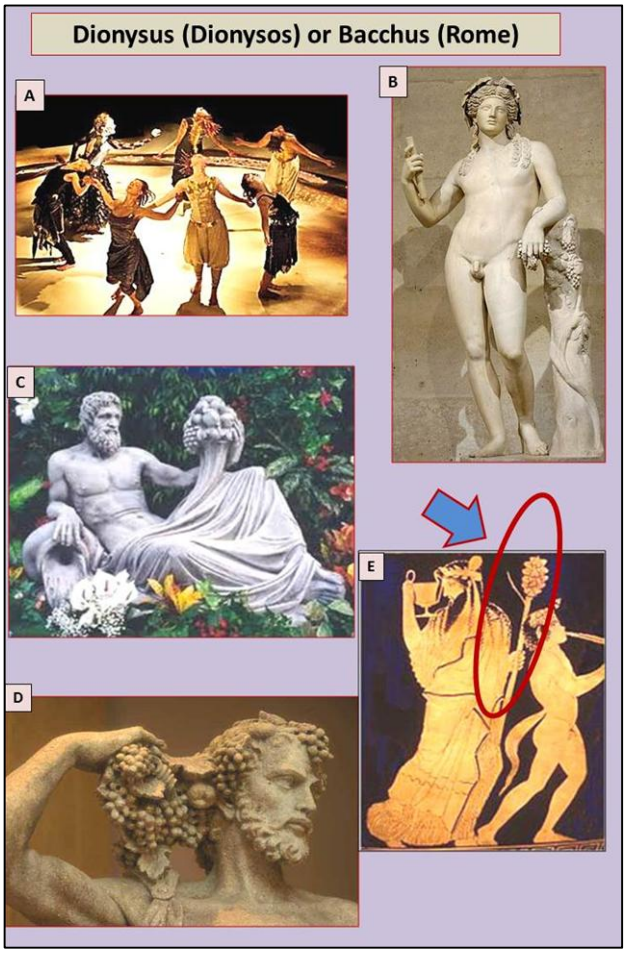


Figure 6. The God of Altered States of Consciousness (ASC) and Wine: DIONYSUS (Dionysos-Helen) or BACCHUS (Rome). A) The hypersexual, hyper-orgasmic, and promiscuous magician warriors of Dionysus: The Bacchae, from a contemporary re-creation play (Euripides).B) A Statue of Dionysus, with grapes and grape leaves. C) A Statue of Dionysus, depicted with various plants and fruits at the head intermingled with his hair, particularly grapes and grape leaves. D) Dionysus statue. In most of the Dionysus statues, the hair of Dionysus is interwoven with grapes, from which wine was made; however a closer detailed analysis of these statues will reveal that not only grapes, but also other herbs and plants were placed with grape leaves. E) Dionysus with a Satyr, holding the magical stick, Thyrsus. See the tip of Thyrsus, that is not always in the shape of a pine cone, but it may resemble other plants, such as Phalaris species or wheat, as well.

The tip of the *thyrsus* might have also been symbolizing *Phalaris aquatica, Phalaris arundinacea, P. brachystachys, P. canariensis,* which contain the powerful hallucinogen DMT and are very abundant in Anatolia and the Mediterranean. Also, as mentioned above, *Peganum harmale*, a MAO inhibitor, was very wide spread in the region and used in magic and also in pagan rituals (Figures 9, 11). Thus either in the *kykeon* or *absinthe* or in other drinks of the Dionysian festivals, DMT could have been ingested as well as *thujone (*in *Artemisia absinthium)* and other proposed psychoactive substances. *Kykeon* could be a combination of many psychoactive plants including ergot alkaloids, magic mushrooms, *Phalaris* species and worm wood. Also DMT requires high alcoholic concentrations to dissolve and to be extracted, just as in the case of absinthe, of which the ethyl alcohol ratio might go up to 74 %. Thus most probably, some of the *Phalaris* species might have been used with the ingestion of MAO inhibitor *Peganum harmale* during the Dionysian rituals.

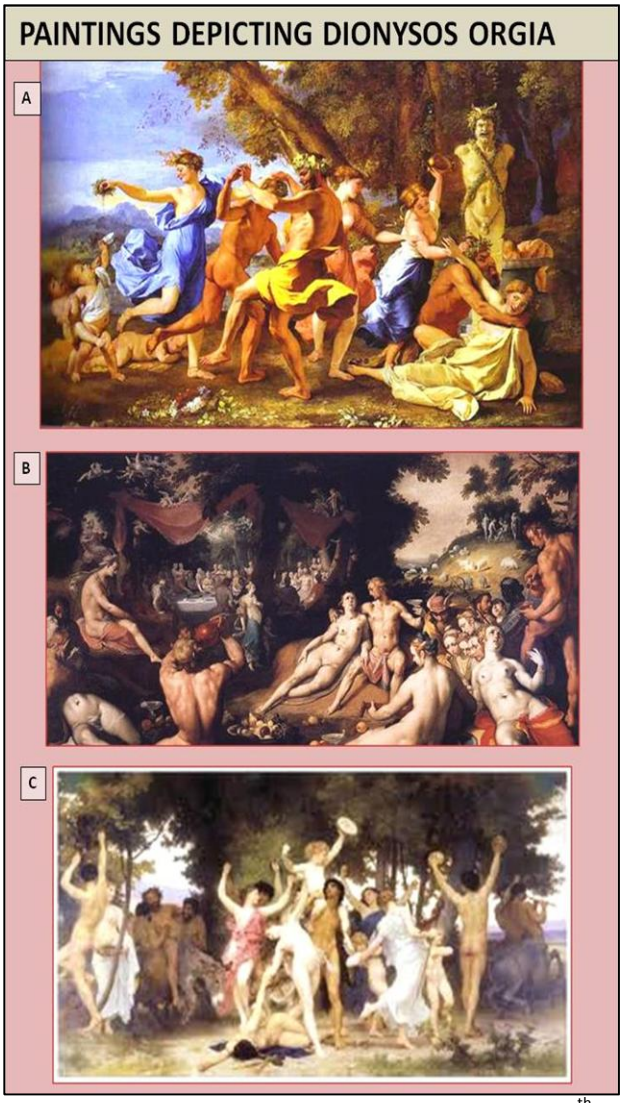


Figure 7. Paintings depicting Dionysus Rituals and Orgia. 18th and 19th Centuries.

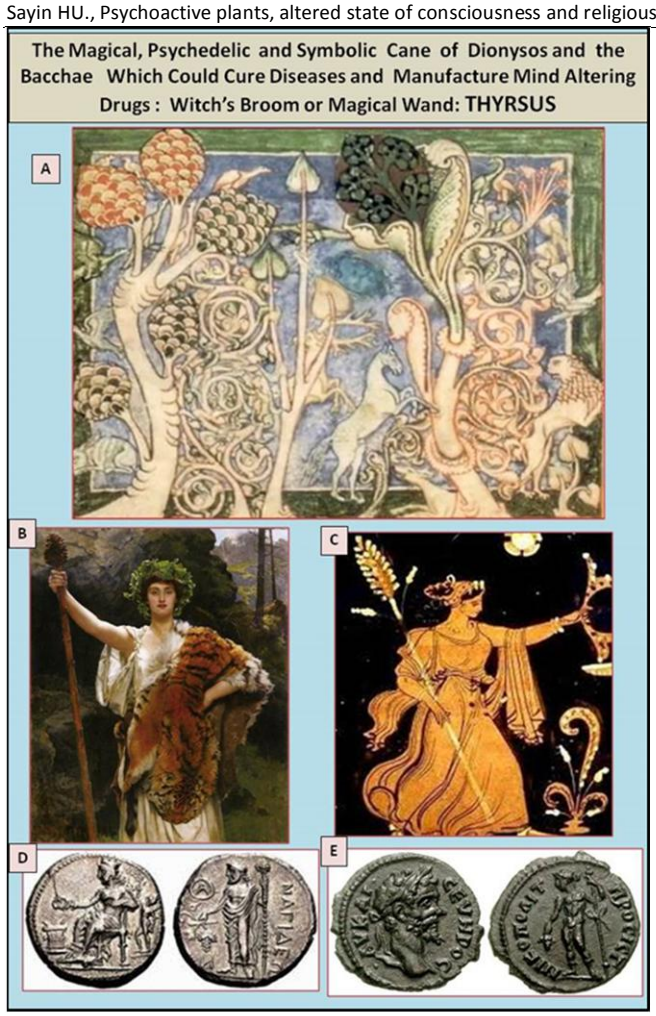


Figure 8. THYRSUS: The Magical Cane that could cure diseases and easily manufacture wine and probably many other mind altering plant-origin drugs. Note that the THYRSUS contains many different plants and herbs, at the tip. A) A medieval painting depicting various psychoactive plants. B) A contemporary re-animation of Dionysus in a play. C) Bacchae carrying a Thyrsus. A detail of an authentic ancient Greek vase. Notice the tip of Thyrsus that is not pine cone shaped, but resembles another plant, such as phalaris species (see Figure 9). D) Ancient Greek coin depicting a Thyrsus on it. E) An ancient Greek coin with the head of Dionysus and also a warrior of Dionysus carrying a Thyrsus.

Sufis and Hassan Sabbah's Cult

There are also reports that Cannabis, opium and other psychoactive plants were consumed in a Sufi sect called *Melamis* and also in the Cult of *Hassan Sabbah, Hashissins* (Sayin, 2006, 2007).

Smoking in Europe during Medieval Ages

When we also look at the paintings related with taverns (*tabern*) between the 12th and 16th centuries, we spot the long elongated pipes with a small reservoir. Tobacco, which was harvested in the Americas by the Indians, became popularized in Europe in 17th century. There was no widespread tobacco use in Europe before the 18th Century. In most of the paintings of Breughel and Bosch, and other early painters we see that the people who are entertaining and drinking, also smoke pipes. Did these pipes contain tobacco or some other weeds such as, cannabis, opium, wormwood or some other psychoactive weed?

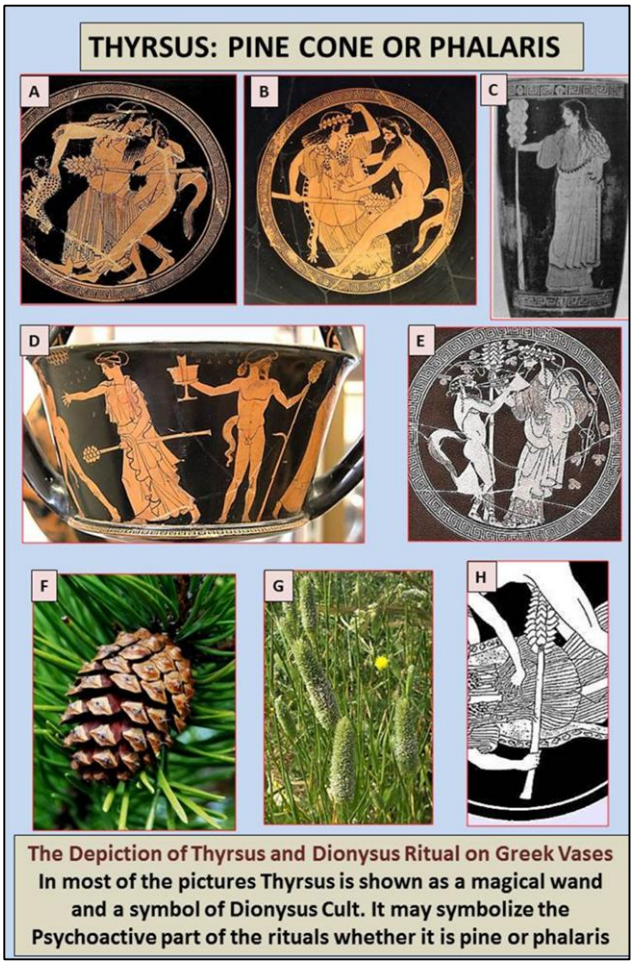


Figure 9. THYRSUS; The magical cane or wand that could cure diseases, turn water into wine or psychedelic drinks, and gave sexual performance to males or females. The symbolic LOGO of the Dionysus Cult and Rituals. Please Notice the tips of Thyrsus: Is it a pine cone, or a different plant, such as wheat or phalaris species? A) A Bacchae making love to a Satry, using Thyrsus. Detail from an ancient Greek vase. Notice the tip of Thyrsus. B) A Bacchae, using her Thyrsus, induces an erection in a Satyr. Notice the tip of Thyrsus. C) A Bacchae, holding a Thyrsus in her hand. Notice the tip of Thyrsus. From an ancient Greek vase. D) Satyrs and Bacchae, carrying Thyrsus on an ancient Greek vase. Notice the tips of Thyrsus. E) Dionysus holding a Thyrsus. His warrior, a Satyr, is presenting a drink to Dionysus. Detail of an ancient Greek Plate. Notice the tip of the Tyrsus. F) A classical pine cone. G) Phalaris species (see also Figure 7). Phalaris species resembles wheat, however the body is more elongated and there are more protruding structures on Phalaris. H) A Bacchae is curing a man with a sexual disorder, probably, or to induce erection. The symbolic meaning here is not the magical wand (Thyrsus) inducing erection, but the psychoactive aphrodisiac plants are meant to enhance sexual potency of men. A detail from an ancient Greek plate or vase.



Figure 10. Smoking in Europe. In most of the medieval paintings of Taberns (Taverns), men and women were depicted as smoking pipes. Above paintings are from the early Medieval Ages between 12th century to 16th century. According to *Wikipedia*, *tobacco*, which was harvested in the Americas by the Indians, became popularized in Europe in 17th century. In most of the paintings of Brueghels and Bosch, and other early painters we see that the people, who are entertaining and drinking, also smoke pipes. Did these pipes contain tobacco or some other weed such as, cannabis, opium, wormwood or some other psychoactive weed? When we focus on the shapes of these pipes they are not tobacco pipes, but rather oblong, elongated, elegant pipes that have a very small reservoir to hold a small amount of what is smoked, which is probably psychoactive and effective, while smoking too much of those weed could be dangerous and hazardous. Did early medieval Europeans consume an important amount of cannabis, opium or other psychoactive plants and weeds, which could then be manufactured easily as home-made!

Evidences from the Old Pagan Sun-GOD Image and Psychoactive Plants

Recently the close analysis and scrutiny of mythology and religions has revealed that some mythological god, or goddess images and their life stories were very similar to the monotheist Judeo-Christian prophet images. A scientific analysis of these life stories shows the resemblance of the life of Jesus Christ to many other pagan gods or prophets. Strikingly, the Egyptian mythological god Horus (3000 B.C.), the Greek mythological Figure Attis (1200 B.C.), the Persian mythological god Mithra (1200 B.C.), the Greek mythological god of wine and ASC, Dionysus (500 B.C.), the Indian mythological god Krishna (900 B.C.) and many others, along with Jesus Christ had many attributes in common, stressing the fact that the Jesus Christ Figure was merely a continuation in the long line of ancient pagan gods and the Sun-god, and there was enormous resemblance in the events in the life stories of all of them, which violated the main postulates of probability to be just a coincidence, including many aspects of pagan astrological symbolism (Freke & Gandy, 2001, 2002, 2006; Acharya, 1999, 2004; Ruck, 2000, 2001, 2009, 2013). The resemblance patterns were as follows:

- Being born on December 25th. (*A special date in pagan astrology when 3 king stars of Orion, Sirius and the Sun come to the same plane*)
- They all belong to the zodiac sign group of *Capricorn*. (author of the article does not support and believe in zodiac signs and their stories, but this is a resemblance pattern of many of the pagan Gods and Goddesses)
- An Eastern bright Star accompanies the birth (*Sirius*?)
- Being born of a Virgin mother. (*Virgo zodiac*? *Calendar begins with the Constellation Virgo?)*
- Three Kings accompanied the birth and announced the good news (*Three king stars of Orion*?)
- Adored by three Kings.
- The pictures depicting them had many discrete and hidden symbolisms of psychoactive plants.
- All had 12 disciples. (*12 zodiac loci of the sun?)*
- They all became teachers at the age of 12.
- They were all baptized at the age of 30. (*The Sun enters each zodiac by 30 degrees?*)
- They all had similar nicknames, like: Alpha-Omega, the Sun, the Light, Lamb of God, the Shepherd; the Light of Sun.

- They were all betrayed.
- They were crucified or killed. (*The Sun hangs on a cross-crux, crucified passing on each equinox?*)
- They all stayed dead for three days. (*The Sun dies for 3 days on 22nd December, winter solstice, when it stops its movement to the South and then rises up to the North again on 25th December: resurrection?*)
- They were all resurrected at the end.
- Many details of ancient reliefs, paintings and drawings related with them have many entoptic images.
- They died on 22nd of December and resurrected on 25th of December, the date when they were born.

Table 1-A. The Overall Summary of Psychoactive Plants Consumed by Ancient Cultures During the Religious Rituals

Psychoactive Plant	Active Hallucinogenic-Ingredient/ Receptor System	The Regions/Cultures Used The Centuries Used	Used For	References
OPIUM **Papaver Somniferum**	Morphine (12 %) Codeine Papaverine Noscapine Opioid receptors	Nearly Everywhere-Old World 5700 B.C.-until 19th century Used since the Neolithic Age	Narcotic Analgesic Not Hallucinogen Partial Hallucinations Used in Rituals Anesthesia-Analgesia	Stafford, 1978 Merlin, 2003
CANNABIS **Cannabis Sativa**	THC Other Active Metabolites Cannabinoid Receptors	Nearly Everywhere-Old World 10 000 B.C.-until 19th Century Central America/Mexico South America	CNS stimulant Hallucinogenic Religious-Shamanic Rituals/ Trance States	Stafford, 1978 Merlin, 2003 Nichols, 2004 Ruck, 2009 Diaz, 2010
EPHEDRA **Ephedra Sinica**	Ephedrine Noradrenergic Receptors	Mesopotamia 60 000 B.C. – until 20th Century China (Ma Huang, 3000 B.C.)	CNS Stimulant/ Not Hallucinogen with Hallucinogens/ Aphrodisiac Religious-Shamanic Rituals/ Trance States	Stafford, 1978 Merlin, 2003
MANDRAGORA **Mandragora Officinarum**	Atropine Scopolamine Apo-atropine Cholinergic Ach Receptors (antagonism)	Egypt/Middle East/Europe 1500 B.C.	Hallucinogen inducing Delirium Religious-Shamanic Rituals/ Trance States Magic	Stafford, 1978 Merlin, 2003
BLUE WATER LILY **STAR LOTUS** **Nymphaea Nouchali**	Aporphine Apomorphine Opioid receptors	Egypt (2500-3000 B.C.) India (2500 B.C.)	CNS Depressant / Sedative/ Mild Hallucinogen Religious-Shamanic Rituals/ Trance States	Stafford, 1978 Merlin, 2003
HARMALA **Peganum Harmala**	Harmine Harmaline Harmane MAO inhibition	Caucasus (4800-3200 B.C.) Anatolia-Middle East India	MAO inhibitor Not Hallucinogen With DMT-Containing Plants	Stafford, 1978 Merlin, 2003 Gable, 2007 Ruck, 2009
AYAHUASCA **Banisteriopsis caapi Vine**	Harmine Harmaline MAO inhibition	South America and Amazons Time unknown Possibly 2000-3000 B.C.	MAO inhibitor Not Hallucinogen With DMT-Containing Plants	Stafford, 1978 Merlin, 2003 Nichols, 2004 Gable, 2007 Diaz, 2010 Buoso, 2012
AYAHUASCA-DMT **Sychotria viridis/ Diplopterys cabrerana/ Psychotria carthagenensis**	DMT (Di-methyl-Triptamine) Serotonin-Dopamine-Adrenergic Receptors	South America Amazons Time unknown Possibly 2000-3000 B.C.	DMT-Containing Plants Powerful Hallucinogen Religious-Shamanic Rituals/ Trance States/ Shamanic Purposes	Stafford, 1978 Merlin, 2003 Nichols, 2004 Gable, 2007 Ruck, 2009 Diaz, 2010
PHALARIS-DMT **Phalaris aquatica/ Phalaris arundinacea/P.brachystachys /P. canariensis**	DMT (Di-methyl-Triptamine) Serotonin- Dopamine-Adrenergic Receptors	Anatolia Greek- Hellenic- Roman 2500-2000 B.C.	DMT-Containing Plants Powerful Hallucinogen Dionysus Rituals-Orgia Paganic Purposes	Gable, 2007 Sayin, 2014

Table 1-B. The Overall Summary of Psychoactive Plants Consumed by Ancient Cultures During the Religious Rituals

Psychoactive Plant	Active Hallucinogenic-Ingredient/ Receptor System	The Regions Used / The Centuries Used	Used For	References
MAGIC MUSHROOMS Psilocybe cubensis Copelandia, Galerina, Gymnopilus, Inocybe, Mycena, Panaeolus, Pholiotina, Pluteus, and Psilocybe Species; Psilocybe Strophoria, Panaeolus, Copelandia, and Conocybe	Psilocybin Psilocin / Serotonin-Dopamine Receptors	MAYA-AZTEC / Mexico-American Indians / Middle East /Asia / Europe/ Africa/ / 2500 B.C.-15th Century	Powerful Hallucinogen Religious-Shamanic Rituals/ Trance States	Stafford, 1978 Wasson, 1980 Dobkin de Rios, 1992 Viesco, 1993 Nichols, 2004 Blainey, 2005 Ruck, 2009 Diaz, 2010 Akers, 2011
MAGIC MUSHROOM Amanita Muscaria	Muscarine / Cholinergic System	Europe-Central America South America / Time unknown	Powerful Hallucinogen Inducing Delirium Shamanic tool	Stafford, 1978 Viesco, 1993 Nichols, 2004
IBOGAINE Tabernanthe Iboga	İbogaine / NMDA Receptors Kappa Opioid Receptor Agonist	Gabon-Africa-BWITI Cult / Time unknown	CNS stimulant Powerful Hallucinogen Aphrodisiac / Religious-Shamanic Rituals/ Trance States-to contact ancestors	Stafford, 1978 Popik, 1995 Alper, 1999 Sayin, 2012
SALVIA DIVINORUM	Salvinorin A / Kappa Opioid Receptor Agonist	Aztecs/Mazetecs Mexico / 14th Century	Short Acting Powerful Hallucinogen Inducing Delirium Shamanic Purposes	Viesco, 1993 Nichols, 2004
MORNING GLORY SEED Turbina corymbosa	Lysergic Acid (similar to LSD) / Serotonin-Dopamine-Receptors	ololiuhqui by the Aztecs Central America Caribbean- Mexico / 14th-16th Century	LSD-like effect Powerful Hallucinogen Religious-Shamanic Rituals/ Trance	Stafford, 1978 Wasson, 1980 Nichols, 2004 Blainey, 2005 Ruck, 2009
WORM WOOD Arthemisia Absinthium	Thujone / Cannabinoid Receptors	Anatolia-Greece-Europe Dionysus Rituals-Orgia / 1500 B.C.-400 A.D.	Hallucinogen Aphrodisiac In Absinthe Religious-Shamanic Rituals/ Trance	Stafford, 1978 Daniélou, 1992 Nichols, 2004 Gimpel, 2006 Lachenmeier, 2006 Azar, 2006 Sayin, 2014
PEYOTE Lophophora williamsii	Mescaline / Serotonin-Adrenergic Receptors	Mexico-Yaqui Indians Central America-Indians / 8000 B.C.	Powerful Hallucinogen Religious-Shamanic Rituals/ Trance LSD/Psilocybin-like Effects	Stafford, 1978 Castaneda, 1985 Nichols, 2004 Viesco, 1993 Ruck, 2009 Diaz, 2010
BUFOTENIN TOAD TOXIN Bufo alvarius	5-Hydroxy DMT (Bufotenin) Used with MAO inhibiting Entheogen Plants	Meso-American Cultures / 2000 B.C.	Powerful Hallucinogen Religious purposes	Davis, 1992 Blainey, 2005 Ruck, 2009

The above information supports the hypothesis that Jesus Christ either never lived, or if ever he did live, most of the stories about him were made up after his death, assimilated from former pagan mythology. Horus, Attis, Mithra, Krishna, Dionysus and Jesus Christ can either be the same person (or pagan Sun-god) or a continuation of another in different cultures originating from the times of the Egyptians, or even before.

Another point ignored by historians is that in most of the ancient reliefs, drawings and paintings, when observed thoroughly, it is possible to differentiate many Figures, objects and geometrical shapes that resemble many entoptic images. Also, some of the others convey some Figures of psychoactive plants

associated with pagan gods and goddesses, such as, opium, *psilocybin* containing magic mushrooms, DMT containing *Phalaris* species, *thujone* containing wormwood (*Artemisia absintheum*), and pinecones, symbolizing the pineal gland and DMT, which is endogenously released from the pineal gland.

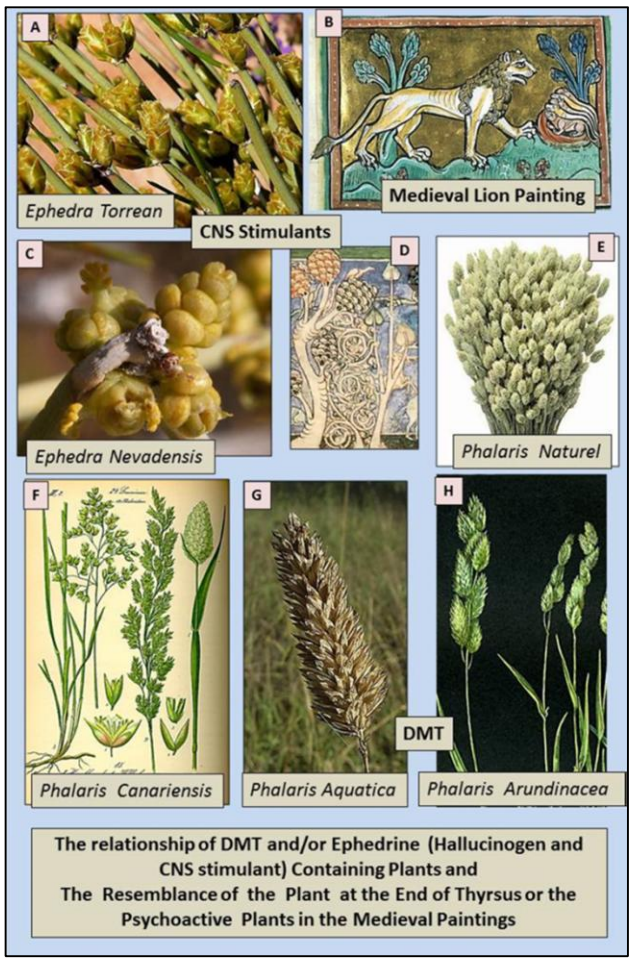


Figure 11. The plants Ephedra and Phalaris species resemble the psychoactive plants drawn in the Mediaval ages and also the tip of THYRSUS. A) Ephedra plant resembling ancient drawings of psychoactive plants. (*Ephedra Torrean*). B) A psychedelic medieval lion painting. Notice the plants which resemble ephedra and phalaris. C) Ephedra plant. (*Ephedra nevadensis*). D) An ancient medieval painting which depicts the magical plants of the alchemists. See the resemblance of this plant with ephedra and phalaris species. Please remember that most of the magical alchemy plants were psychedelic and psychoactive plants at those times. F) Drawing of Phalaris species, which contain high amounts of DMT. (*Phalaris canariensis*). G) Closer view of *Phalaris aquatica*. See the resemblance of this plant to the tip of Thyrsus. H) A DMT containing Phalaris species: *Phalaris arundinaceae*

Discussion

As presented above and summarized in Tables 1-A and 1-B, there is a massive amount of evidence to prove that many psychoactive plants were consumed during the ancient religious rituals, pagan rites, shamanic ceremonies and healing sacramental ceremonies in many cults, religions or believer groups, all over the world, throughout hundreds of centuries, since 5000-10 000 B.C., when these plants were not prohibited by the governments; on the contrary, master shamans, religious monks or the governing system promoted the use of them for ritual, religious, shamanic, treatment, medicinal, magical and many other secretive purposes.

Many of these psychoactive plants contain powerful alkaloids and natural chemicals that induce H-ASCs in the human beings. As reported in our other article, the set and setting and the individual's psychological status are very important when perceiving many non-existing images and hallucinations during the effects of those powerful substances (Sayin, 2012a). Besides, the human psyche and consciousness can create many non-existing new forms and formats of creatures, beings, realities while under the influence of psychoactive plants, as well as unraveling the sub-consciousness and collective unconscious, which is already genetically coded in the depths of the psyche. The images may transform, distort, and change dimensions, such that a new kind of reality or an inconsistent and para-logical system of thoughts and ideas can be created during such inner journeys. Figures 12, 13 illustrate how the outer world's images and perceptions can be distorted and altered during the ingestion of LSD, psilocybin, mescaline and cannabis. A type of feeling of unification with the environment, partners, friends and the universe is generally experienced. Mystical illusions and delusions may occur frequently; religious figures, shapes, symbols and images are usually seen (Sayin, 2012a). The self may perceive that there is another reality. Paranoid thinking is not uncommon.

During the occurrence of ancient religions, if there is the influence of different and altered consciousness states induced by the psychoactive plants, then the possibility of those religious sub-structures and the images being unreal and imaginary can be questioned and debated. Psychoactive plant-induced consciousness was not only influential in the creation and formation of ancient pagan and shamanic religions, but also many forms and structures of newer religions have been also affected by the mind of H-ASCs. It is also

hypothesized that such an altered consciousness may have affected the formation of many attributes and infra-structure of European cultures as well as the belief systems and religions (Ruck, 2000, 2001, 2006a, b, 2009, 2013; Daniélou, 1992; Sayin, 2012a).

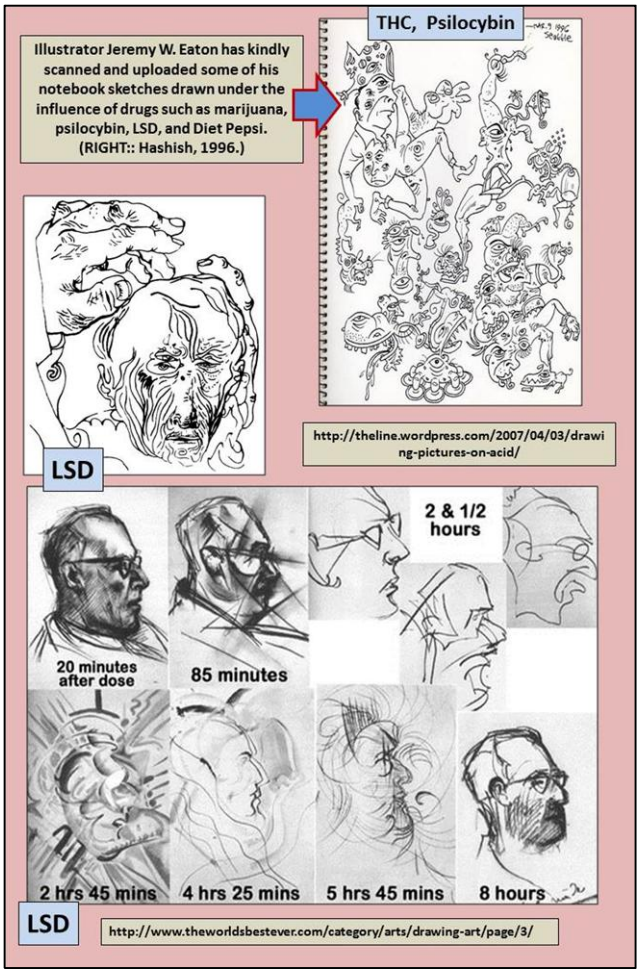


Figure 12. Drawings of the artists who were under the effect of LSD, Psilocybin and THC. See the distortion of the perceptions and change of space-time continuum.

We may derive the conclusion that the ancient pagan cultures, which created the old myths and the old religions, consumed psychoactive plants during sacred and religious rituals, even before the invention of the alphabet, and therefore most of the religious abstract figures, such as ghosts, angels, nymphs, spirits, demons, monsters, mythical creatures, supra-natural creatures, Satan, gods and goddesses etc. could have been perceived or envisioned during the H-ASCs, induced by psychoactive plants. Thus, many factors in the old and new religions, which are a continuation of the old pagan traditions, could have been created by the human imagination and altered perception during religious rituals.

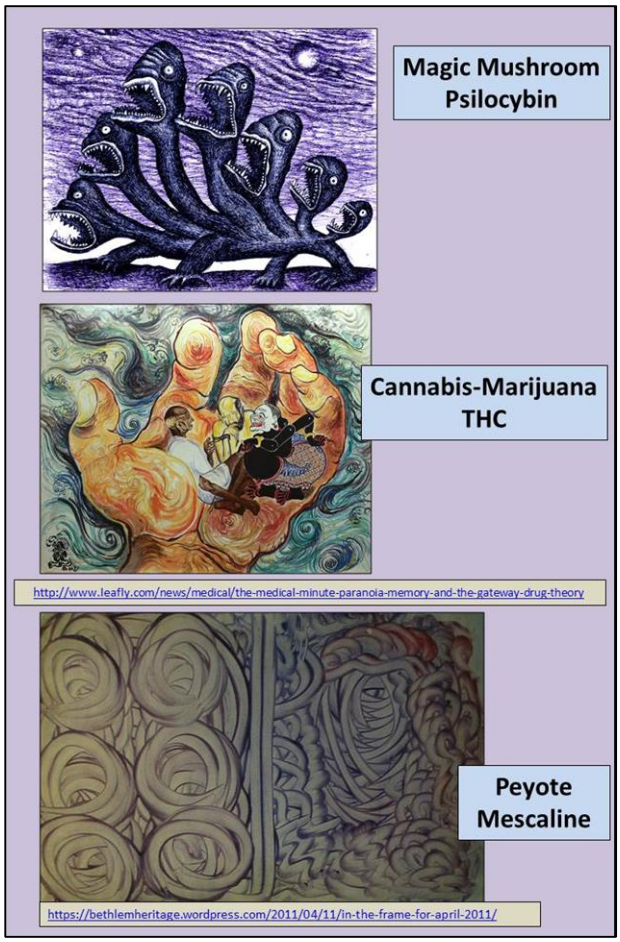


Figure 13. Drawings of the artists who were under the effect of Psilocybin, THC and mescaline**.** Notice the different specific effects of the hallucinogens. Each has a different format. Also notice the distortion of the self, perceived objects and the creation of different monsters.

Therefore, the validity of many religious structures to be the truth and the manifestations of objective reality violates pure logical thinking, scientific reasoning and the extensive weight of the evidence documented herein.

Acknowledgements

I would like to thank Levent Kartal for providing important information about his experiences in South America and the Amazonia, and about his personal trials and cultural investigations for this article. I would also like to thank Prof. Carl Ruck and Prof. Carlos H. Schenck, for reading and editing this article, and for giving invaluable comments and insights for both this article and the accompanying next article.

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