

ANCIENT SHAMANISM AND MODERN PSYCHOTHERAPY: FROM ANTHROPOLOGY TO EVIDENCE-BASED PSYCHEDELIC MEDICINE¹

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ABSTRACT: In the last years, the debate on the therapeutic use of psychoactive drugs and compounds has intensified and has attracted a progressively growing body of research as well as of conferences and training courses. This is anticipated to revolutionize future mental health care. However, a medieval obscurantist climate remains that hinders further advances in the field. The research field of psychoactive drugs, despite its promises, is characterized by a number of challenges which, in the future, should be addressed, concerning, for instance, their potential therapeutic use. There is a concrete possibility to revitalize the use of these substances by bridging past and present, combining ancient knowledge and modern science to serve new therapeutic paradigms.

KEYWORDS: psychoactive drugs and compounds; psychedelic Renaissance; psychedelic medicine

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INTRODUCTION

In the last years, the debate on the therapeutic use of psychoactive drugs and compounds has intensified and has attracted a progressively growing body of research as well as of conferences and training courses. Some researchers feel to live a true "psychedelic Renaissance" (Sessa, 2017), which is anticipated to revolutionize future mental health care, whereas other scholars perceive a still persisting medieval obscurantism limiting this "Renaissance bloom" (Miller, 2017).

Psychotropic or psychoactive substances, as the term itself says, are able to act on the ordinary state of the psyche and, as such, to enable humans to experience non-ordinary states of consciousness. In the ancient times, in the traditional cultures, this was achieved through the administration of plant derivatives and was considered as a highly respected, sacred practice to perform within a ritual context.

Table 1. List of pioneers in the field of experimentation of psychoactive drugs and compounds.

Pioneer in the field of psychoactive drugs	Birth and death	Notable work(s)
Augustin Pyrame de Candolle	1778-1841	A prominent Swiss botanist, author of books like " <i>Historia Plantarum Succulentarum</i> " and " <i>Astragalogia</i> "
Ernst von Bibra	1806-1878	A German naturalist, author of "Plant Intoxicants: A Classic Text on the Use of Mind-Altering Plants"
Richard Spruce	1817-1893	A British botanist specialized in bryology and explorer
Mordecai Cubitt Cooke	1825-1914	A prominent British scholar of botany and mycology
Paolo Montegazza	1831-1910	An Italian neurologist, physiologist, and anthropologist, he investigated the effects of

			coca leaves
Alphonse Trémeau de Rochebrune	1836-1912		A French botanist, malacologist and a zoologist
Ángelo Mariani	1838-1914		Italian, inventor of the first cocawine, Vin Mariani
Stephen Powers	1840-1904		An American ethnographer
William James	1842-1910		A prominent American philosopher and psychologist
Louis Lewin	1850-1929		A German pharmacologist, he attempted the first systematic classification of psychoactive drugs with his book " <i>Phantastica</i> " (1924)
Carl Hartwich	1851-1917		Author of " <i>Die menschlichen Genussmittel</i> "
Karl Koller	1857-1944		An Austrian ophthalmologist, he introduced cocaine as a local anaesthetic for eye surgery
Henry Havelock Ellis	1859-1939		A British psychologist, physician and writer, he experienced on himself the effect of mescaline
John Harshberger	William 1869-1929		An American botanist specialized in plant geography, ecology
Aleister Crowley	1875-1947		A well-known recreational drug experimenter

Alexandre Rouhier	1875-1968	Author of “ <i>Le peyotl la plante qui fait les yeux émerveillés</i> ”
Kurt Beringer	1893-1949	A German psychiatrist and neurologist
Aldous Huxley	1894-1963	A prominent English writer, novelist, and philosopher
Max Rinkel	1894-1966	The first doctor in North America to work with LSD, he has been President of the Society of Biological Psychiatry
Heinrich Klüver	1897-1979	A German psychologist
Robert Gordon Wasson	1898-1986	Ethnomycologist
Harold A. Abramson	1899-1980	An early advocate of therapeutic LSD
Albert Hofmann	1906-2008	He synthesized and experienced on himself the effect of LSD
Weston La Barre	1911-1996	American anthropologist and scholar in the field of ethnobotany
Leo Zeff	1912-1988	An American psychologist and psychotherapist, he pioneered the use of LSD, ecstasy/MDMA, and other psychoactive drugs in psychotherapy
Julius Axelrod	1912-2004	Prominent biochemist, he was awarded the Nobel Prize

John Cunningham Lilly	1915-2001	American physician, psychoanalyst, psychonaut, neuroscientist and philosopher
Richard Evans Schultes	1915-2001	American biologist, he is considered the father of modern ethnobotany
Ronald Arthur Sandison	1916-2010	A British psychiatrist and psychotherapist, he pioneered the use of LSD in psychiatry and clinical psychology
Humphry Fortescue Osmond	1917-2004	He invented the word psychedelic
Abram Hoffer	1917-2009	A Canadian psychiatrist
Oscar Janiger	1918-2001	Experimental psychiatrist and psychotherapist, he is known for his LSD research
Athanasios Kafkalides	1919-1989	A Greek neuropsychiatrist
Timothy Francis Leary	1920-1996	Author of "The Psychedelic Experience"
Murray Elias Jarvik	1923-2008	He invented the nicotine patch
Alexander Theodore "Sasha" Shulgin	1925-2014	He resynthesized MDMA, and, after recognizing its potential for therapeutic use, gave it to a therapist friend, Leo Zeff
Walter Norman Pahnke	1931-1971	A minister, physician, and psychiatrist, he is most famous for the "Good

			Friday Experiment"
Stanislav Grof		1931-today	A Czech psychiatrist, one of the founders of the field of transpersonal psychology and a researcher into the use of non-ordinary states of consciousness
Claudio Naranjo	Benjamin Cohen	1932-today	A principal developer of Enneagram of Personality theories and a founder of the Seekers After Truth Institute
Barbara Myerhoff		1935-1985	An American anthropologist
Jack Sarfatti		1939-today	An American theoretical physicist, specialized in the study of quantum physics and consciousness
Andrew Weil		1942-today	Founder and director of the Arizona Center for Integrative Medicine
Terence McKenna	Kemp	1946-2000	An American ethnobotanist, mystic, psychonaut, lecturer, author, and an advocate for the responsible use of naturally occurring psychedelic plants
Jonathan Ott		1949-today	He has coined the term "entheogen"
Dennis Jon McKenna		1950-today	An American ethnopharmacologist, and research pharmacognosist

Giorgio Samorini	1957-today	A free, independent scholar in the field of psychoactive drugs and compounds
Julie Holland	1965-today	An American psychopharmacologist, psychiatrist
Patrick Lundborg	1967-2014	A writer on psychedelic culture and author of books like "Psychedelia" and "The Acid Archives"
Patrick Karel Kroupa	1969-today	A heroin addict from age 14 to 30, he got clean through the use of the hallucinogenic drug ibogaine

We do not want here to express a praise of the myth of the "good savage" or of the "good drug", but we would make a serious anthropological reflection on the use of "narcotic substances" that always accompany the life of human beings and even animals on the Planet Earth.

With this regard, we can remember how in Europe drugs use was already present in the times of the Greeks before, and of the Roman Empire, subsequently. The Dionysian rites and the mysteries of Eleusi are historical examples of the use of psychoactive plants.

Archaeological traces of the therapeutic, religious and ritual use of substances such as coca and psilocybin in South America are millennial and bring us to a reality that the Spanish conquest first and the prohibitionist policies then altered so much to lead the public to a distorted view of such substances as demonic plants or capable of leading to madness and death.

In the East, cannabis, similarly, had a comparable fate: the first ascertained evidence of using this plant for therapeutic purposes dates back to the third millennium before Christ (BC) as described in the *Nei-Ching* text, written between 2700 and 2600. The plant was prescribed to treat diarrhoea, bronchitis, migraine, insomnia, appetite and nerve disorders. In India it is witnessed the use of cannabis in the second millennium in the sacred texts of the Vedas, where the demon of the nostrils Vide-Vadat, is symbolized by hemp, which also has the function of favouring ecstasy. In India, hemp is called *bhang* and takes a significant religious meaning as it is the

favourite plant of Shiva God; his followers use it as a source of mystical inspiration. In the Indian religious literature, *vijaya* is called "victory" and in some Sanskrit scripts it is called *indracarana* or "God food".

But "the food of the gods", including not only cannabis, but all psychoactive plants, are defined in the various traditions, are forbidden to humans.

In the history of the Western civilization, prohibition begins its work of destroying use of psychotropic substances, stating that everything that alters the ordinary state of consciousness is potentially damaging and therefore prohibited.

This decision taken by most, if not all of the Western states, has put a halt to psychotropic substances-related research that in the 1970s saw, for example, in the work of Richard Hoffman and of the chemist Richard Evans Schultes, a prestigious ethnobotanist working at Harvard University, discoverer of the so-much discussed lysergic acid diethylamide (*Lysergsäurediethylamid* or LSD), as well as of many other scientists, the opportunity to go through the "Doors of Perception" (just to quote the title of the 1954 Aldous Huxley's essay).

The doors of psychoactive substance research over the last 50 years have been closed and research has been relegated to some laboratories or practitioners who have continued experimenting and reporting their personal experiences, however, contributing to the scientific progress that calls up for designing investigation protocol, carrying out the experimentation and testing, following a strict, rigorous and statistically robust methodology.

Meanwhile, data on anti-prohibition policies have shown that prohibition itself has not led to the diminution of abusive perpetuation in less secure and controlled spaces, nor to the possibility of discovering the therapeutic potential of the substances and their possible limits.

Today, psychiatrists, neuroscientists, psychologists, anthropologists in Europe, the USA and South America, following the more or less rigid regulations of each state (Ardito et al., 2017; Firenzuoli et al., 2017; Gulluni et al., 2018; Re et al., 2015; Re et al., 2016; Re et al., 2017), are progressively collecting the legacy of the previous researchers (Table 1) with the aim of strengthening research on psychedelics, negotiating a regulation for therapeutic and scientific uses and providing serious and legitimate information to the public.

The substances currently undergoing clinical trials are cannabis, psilocybin, N,N-dimethyltryptamine (DMT), ayahuasca, ecstasy (MDMA) and LSD.

These are experimented against most common mental health pathologies, such as Post Traumatic Stress Disorder (PTSD), cancer-related anxiety, depression, cachexia, pharyngeal pain, multiple sclerosis and other organic disorders.

The research developed in the United States, Switzerland, England and Spain follows rigorous research protocols in which the mindset or set (the clinical and biographical history of the patient) plays a key role, the setting (the environment in which the experience is perceived) and the substance (typology, dosage, quality and quantity) play a major role.

The treatment setting provides a cozy room with a sofa that is used during the session, a mask to cover visual stimuli, headphones linked to a piece of music chosen by the patient and two therapists, usually a physician and a psychotherapist who monitor the biological parameters of the person and are available for any need. The target involves inclusion or exclusion criteria/choices for research participation, pre- and post-session evaluations by administering tests and psychotherapy sessions to prepare before and, then, integrate the experiences lived during the session.

Some patients report dissolution experiences of the Ego that, thanks to advanced and sophisticated neuro-imaging techniques, are associated with a marked decrease in activity in a brain area called "Default Mode Network" (DMN); this area seems to be overactive during episodes of rumination and rebirth, typical in depressive states, and plays an important role also in the ability of introspection and the development of mind theory, or the ability to "read" and interpret the emotions of others.

Additionally, substances such as MDMA or Ayahuasca have empathic properties and are able to develop a state of trust and compassion, also allowing the emergence of ancient or removed memories, facilitating the processing of traumas and the possible treatment of addictions whose etiological cause/trigger is given by a traumatic event/component.

However, because of regulatory concerns, sample sizes are small, given the difficulties involved in experimenting with substances. Like any other *pharmakon*, psychoactive substances may too lead, during or after administration, to the insurgence of adverse effects that, as in any experimentation, may and must be reported. However, the presence of suitably trained staff and a safe and secure context can be the ingredients to be able to proceed to an experimental process that freedom of research in science should provide to researchers.

As such, the research field of psychoactive drugs, despite its promises, is characterized by a number of challenges which, in the future, should be properly addressed, concerning, for instance, their potential therapeutic use. There is a concrete possibility to revitalize the use of these substances by bridging past and present, combining ancient knowledge and modern science to serve new therapeutic paradigms.

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