

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

Nicola Luigi Bragazzi, Hicham Khabbache, Ignazio Vecchio, Mariano Martini,
Marco Perduca, Riccardo Zerbetto and Tania Simona Re

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

¹ Editor's note: *Foundations of Mind*, the independent research group that has provided the papers for this special edition, has never taken either corporate or state money and is financed entirely by donations. Authors keep copyright without paying. The typical fee for this charged by open-access journals such as those published by PLOS, is around \$2k. If you value this project, and wish to see further such proceedings from

this group, we ask you to consider donating to *Foundations of Mind* – as little as \$5 per download, through their website: <http://www.foundationsofmind.org/donate>. This will ensure there will be further published proceedings on the foundations of mind like this one for you and others to enjoy free.

www.bionoetics.org 142

NICOLA LUIGI BRAGAZZI , HICHAM KHABBACHE, IGNAZIO VECCHIO, MARIANO MARTINI, MARIO PERDUCA, RICCARDO ZERBETTO & TANIA SIMONA RE 143

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

A prominent Swiss botanist, author of "*Historia Plantarum Succulentarum*" and "*gia*"

Birth and death Notable work(s)

Augustin Pyrame de Candolle

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

Alphonse Trémeau de Rochebrune
A French botanist,

BIONOETICS 144

malacologist and a zoologist

coca leaves

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 "*Phantastica*" (1924)

Carl Hartwich 1851-1917 Author of "*Die menschlichen*

Genussmittel"

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

, ecology

John William Harshberger

1869-1929 An American botanist specialized in plant

Aleister Crowley 1875-1947 A well-known recreational

drug experimenter

NICOLA LUIGI BRAGAZZI , HICHAM KHABBACHE, IGNAZIO VECCHIO, MARIANO MARTINI, MARIO PERDUCA, RICCARDO ZERBETTO & TANIA SIMONA RE 145

Alexandre Rouhier 1875-1968 Author of "*Le peyotl la plante*

qui fait les yeux émerveillés"

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

psychedelic

1917-2004 He invented the word

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

regarding its potential for therapeutic use, gave it to a friend, Leo Zeff

Alexander Theodore "Sasha"

Shulgin

1925-2014 He resynthesized MDMA, and, after

Walter Norman Pahnke 1931-1971 A minister, physician, and psychiatrist, he is most famous for the "Good

NICOLA LUIGI BRAGAZZI, HICHAM KHABBACHE, IGNAZIO VECCHIO, MARIANO MARTINI, MARIO PERDUCA, RICCARDO ZERBETTO & TANIA SIMONA RE 147

"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

of his theories and a founder of the Seekers After Truth

Claudio Benjamín Naranjo Cohen

1932-today A principal developer of Enneagram of

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

of his use of naturally occurring psychedelic

Terence Kemp McKenna

1946-2000 An American ethnobotanist, mystic, psychonaut, lecturer, author, and an advocate for the

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

NICOLA LUIGI BRAGAZZI , HICHAM KHABBACHE, IGNAZIO VECCHIO, MARIANO MARTINI, MARIO PERDUCA, RICCARDO ZERBETTO & TANIA SIMONA RE 149

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 ethno- botanist 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.

NICOLA LUIGI BRAGAZZI , HICHAM KHABBACHE, IGNAZIO VECCHIO, MARIANO MARTINI, MARIO PERDUCA, RICCARDO ZERBETTO & TANIA SIMONA RE 151

Nicola Luigi Bragazzi^{1,2,3,4}, Hicham Khabbache⁴, Ignazio Vecchio⁵, Mariano Martini^{2,3}, Marco Perduca⁶, Riccardo Zerbetto⁷, Tania Simona Re^{3,*}

¹Postgraduate School of Public Health, Department of Health Sciences (DISSAL), University of Genoa, Genoa, Italy ²Section of History of Medicine and Ethics, Department of Health Sciences (DISSAL), University of Genoa, Genoa, Italy ³UNESCO Chair "Health Anthropology, Biosphere and Healing Systems", Genoa, Italy ⁴Faculty of Literature and Humanistic Studies, Sidi Mohamed Ben Abdellah University, Fez, Morocco ⁵Department of Clinical and Experimental Medicine, University of Catania, Catania, Italy ⁶Associazione Luca Coscioni, Rome, Italy ⁷Gestalt Research Center - CSTG, Milan, Italy *Corresponding Author tania.re77@gmail.com

REFERENCES

1. Ardito, Rita, Pirro, Piero Stanley, Re, Tania Simona, Bonapace, Isabella, Menardo, Valentino, Bruno, Emanuela, and Gianotti, Laura, 'Mindfulness- Based Stress Reduction Program on Chronic Low-Back Pain: A Study Investigating the Impact on Endocrine, Physical, and Psychologic Functioning', *The Journal of Alternative and Complementary Medicine*, vol. 23, no. 8, 2017, pp. 615-623.
2. Firenzuoli, Fabio, Re, Tania Simona, Epifani, Francesco, and Loiacono, Idalba, 'The challenges of global health in a system', in Bistagnino, Luigi (ed.), *microMACRO_EN*, iBooks, 2017.
3. Gulluni, Nadija, Re, Tania Simona, Loiacono, Idalba, Lanzo, Giovanni, Gori, Luigi, Macchi, Claudio, Epifani, Francesco, Bragazzi, Nicola, and Firenzuoli, Fabio, 'Cannabis Essential Oil: a preliminary study for the evaluation of the brain effects', *Evidence-Based Complementary and Alternative Medicine*, 2018, in press.
4. Miller, Richard Louis, *Psychedelic Medicine: The Healing Powers of LSD, MDMA,*

Psilocybin, and Ayahuasca, Park Street Press,
2017.

5. Re, Tania Simona, Palma, José, Martins, Jorge, and Simões, Mario, “Transcultural perspective on consciousness: traditional use of ayahuasca in psychotherapy in the 21st century in western world” *Cosmos and History: The Journal of Natural and Social Philosophy*, vol. 12, no. 2, 2016, pp. 245-253. 6. Re, Tania Simona, Ventura, Carlo, Vitiello, Giuseppe, Simões, Mario, and Martins Jorge, *Transcultural perspective on Consciousness: a bridge between anthropology, Medicine and physics. Cosmos and History: The Journal of Natural and Social Philosophy*, 2015, vol. 11, no. 2, 228-241. 7. Sessa, Ben, *The Psychedelic Renaissance: Reassessing the Role of Psychedelic Drugs in 21st Century Psychiatry and Society*, State University of New York Press, 2017. 8. Re, Tania Simona, Manca, Fabrizio, Siri, Anna, and Spulber, Diana, ‘Communities as agents of change; toward an ecological perspective’, in Bistagnino, Luigi (ed.), *microMACRO_EN*, iBooks, 2017.