Dieter Hagenbach and Lucius Werthmüller:

Albert Hofmann und sein LSD: Ein bewegtes Leben und eine bedeutende Entdeckung (Albert Hofmann and his LSD: Exciting Life and An Important Discovery). Baden: AT-Verlag. April 2011 (in print).

Foreword by Stanislav Grof, M.D.

It is an extraordinary privilege and pleasure for me to write a foreword for the book honoring the life and work of Albert Hofmann, a brilliant researcher and scientist in the best sense of the word, whom I consider my spiritual father. Words can hardly describe the deep gratitude I feel to him for everything that his discoveries brought into my personal and professional life and the lives of countless other people, who used the substances he had synthesized responsibly and with respect that these extraordinary tools deserve.

I first heard Albert's name in 1954 when I worked as medical student volunteer at the Psychiatric Department of the School of Medicine of Charles University in Prague. My preceptor, Docent George Roubíček, had a good working relationship with the Sandoz Pharmaceutical Company in Basel and received from this firm regularly complimentary samples of new products as they were coming to the market. As part of this cooperation, he received one day a supply of diethylamid of lysergic acid, or LSD-25, a new experimental substance with unprecedented psychoactive power. The package arrived with a letter describing the discovery of LSD – Albert's accidental intoxication during the synthesis of this substance, his subsequent self-experiment, and Werner Stoll's pilot study with a group of normal volunteers and psychiatric patients.

Werner Stoll's paper "LSD, ein Phantastikum aus der Mutterkorngruppe" (Stoll 1947) became overnight a sensation in the scientific world. His pilot study showed that miniscule dosages of this new substance (in the range of millionths of a gram –

micrograms or gammas) were able to induce in experimental subjects a state that resembled in many ways naturally occurring psychoses; Stoll also mentioned in his paper that LSD might have interesting therapeutic potential. Sandoz was now sending samples of the new substance to psychiatric research institutes, university departments, and individual therapists asking them if they would be interested in experimenting with LSD and exploring if this substance had any legitimate uses in psychiatry and psychology. The letter gave two suggestions for possible use of LSD: as an agent inducing "experimental psychosis" that might provide insights into biochemical causes of schizophrenia and as an unconventional therapeutic tool that would make it possible for mental health professionals to spend a few hours in a state resembling the experiential world of psychotic patients.

Docent Roubíček was very interested in conducting research with LSD, but his busy schedule did not allow him to spend six to eight hours in the sessions of experimental subjects. He asked me and a few other students to be guides for these people, observe them, and keep records about their experiences. This gave me a unique opportunity to be present in psychedelic sessions of many volunteers, including psychiatrists, psychologists, and artists. I was fascinated by what I saw and heard and was eager to volunteer for a session myself. Unfortunately, to my great dismay, the faculty board decided that students should not be used as experimental subjects.

I could not wait to experience LSD personally and as soon as I graduated from the medical school, I volunteered for a session. Docent Roubíček was interested in electroencephalography and, more specifically, in a process called "driving" or "entraining" the brainwaves. He exposed his subjects to a powerful stroboscopic light and studied the effect of various frequencies on the brainwaves in their suboccipital cortex. He was curious how this process would be influenced by administration of LSD; participation in this research was thus a necessary prerequisite for having an LSD session under his aegis.

The combined effect of LSD and the stroboscopic light triggered in me an

experience of cosmic consciousness of extraordinary proportions (Grof 2006). Although it lasted only a few hours - and its most significant part only about ten minutes - it resulted in a profound personal transformation and spiritual awakening and sent me professionally on a radically different course than the one for which I had been trained and prepared. I have, in fact, been following that trajectory with great determination until this very day. The research of non-ordinary states of consciousness has been my passion, vocation, and profession ever since.

Now, more than fifty years later, I look at this experience as an initiation similar to that of participants in ancient mysteries of death and rebirth. I could not agree more with Albert, who saw deep similarity between LSD and the sacramental drink kykeon used in the Eleusinian mysteries (Wasson, Hofmann, Ruck 1978) and hoped that responsible ritual use of LSD would one day be integrated into Western civilization. He believed that this New Eleusis would bring to modern humanity spiritual and cultural benefits similar to those that its ancient antecedent bestowed on ancient Greece and her neighboring countries.

After my first LSD session, I became deeply involved in psychedelic research and in the study of all related literature. Albert Hofmann's "wonder child" engendered an unprecedented wave of scientific enthusiasm and optimism and spawned a new discipline – the science of consciousness. Never before in the history of science had a single substance held so much promise in such a wide variety of fields. For neuropharmacologists and neurophysiologists, the discovery of LSD meant the beginning of a golden era of research that could potentially lead to major advances concerning neuroreceptors, synaptic transmitters, chemical antagonisms, the role of serotonin in the brain, and the intricate biochemical interactions underlying cerebral processes.

Experimental psychiatrists saw LSD as a unique means for creating a laboratory model for naturally occurring functional, or endogenous, psychoses. They hoped that the "experimental psychosis," induced by miniscule dosages of this substance, could provide unparalleled insights into the nature of these mysterious disorders and open up new

avenues for their treatment. It was suddenly conceivable that the brain or other parts of the body could under certain circumstances produce small quantities of a substance with effects similar to those of LSD. This meant that disorders like schizophrenia would not be mental diseases, but metabolic aberrations that could be counteracted and neutralized by specific chemical intervention. The potential of this research was nothing less that the fulfillment of the dream of biologically oriented clinicians, the Holy Grail of psychiatry – a test-tube cure for schizophrenia.

LSD was also highly recommended as an extraordinary unconventional teaching device that would make it possible for clinical psychiatrists, psychologists, medical students, and nurses to spend a few hours in a world resembling that of their patients and as a result be able to understand them better, communicate with them more effectively, and be more successful in their treatment. Thousands of mental health professionals took advantage of this unique opportunity. These experiments brought surprising and astonishing results. They not only provided deep insights into the inner world of psychiatric patients, but also revolutionized the understanding of the nature and dimensions of the human psyche.

As result of their experiences, many professionals found that the current model, limiting the psyche to postnatal biography and the Freudian individual unconscious, was superficial and inadequate. The new map of the psyche that emerged out of this research added two large transbiographical domains – the perinatal level, closely related to the memory of biological birth, and the transpersonal level, harboring among others the historical and archetypal domains of the collective unconscious as envisioned by C. C. Jung. Early experiments with LSD showed that the roots of emotional and psychosomatic disorders were not limited to traumatic memories from childhood and infancy, as traditional psychiatrists assumed, but reached much deeper into the psyche, into the perinatal and transpersonal regions.

Reports from psychedelic psychotherapists revealed LSD's unique potential as a powerful tool that could deepen and accelerate the psychotherapeutic process. With LSD

as a catalyst, psychotherapy could now be useful with categories of patients that previously had been difficult to reach – sexual deviants, alcoholics, narcotic drug addicts, and criminal recidivists. Particularly valuable and promising were the early efforts to use LSD psychotherapy in the work with terminal cancer patients. With this population administration of LSD could relieve severe pain, often even for patients who had not responded to medication with narcotics. In a large percentage of these patients, it was also possible to ease or even eliminate difficult emotional and psychosomatic symptoms, including depression, general tension, insomnia, and the fear of death. With this kind of relief for patients, the quality of their life was significantly increased during the remaining days and their experience of dying was positively transformed.

For historians and critics of art, the LSD experiments provided extraordinary new insights into the psychology and psychopathology of art, particularly various modern movements, such as abstractionism, cubism, surrealism, fantastic realism, and into paintings and sculptures of various native, so-called "primitive" cultures. Professional painters who participated in LSD research often found that their psychedelic sessions marked a radical change in their artistic expression. Their imagination became much richer, their colors more vivid, and their style considerably freer. They could also often reach into deep recesses of their unconscious psyche and tap archetypal sources of inspiration. On occasion, people who had never painted before were able to produce extraordinary works of art.

LSD experimentation brought also fascinating observations of great interest to spiritual teachers and scholars of comparative religion. The mystical experiences frequently observed in LSD sessions offered a radically new understanding of a wide variety of phenomena from the world of religion, including shamanism, the rites of passage, the ancient mysteries of death and rebirth, the Eastern spiritual philosophies, and the mystical traditions of the world. The fact that LSD and other psychedelic substances could trigger a broad range of spiritual experiences became the subject of heated scientific discussions revolving around the fascinating problem concerning the nature and value of this "instant" or "chemical mysticism,"

LSD research seemed to be well on its way to fulfill all these promises and expectations when it was suddenly interrupted by the infamous Harvard affair, as a result of which Timothy Leary and Richard Alpert lost their academic posts, and the subsequent unsupervised mass experimentation of the young generation. In addition, the problems associated with this development were blown out of proportion by sensation-hunting journalists. The ensuing repressive measures of administrative, legal, and political nature had very little effect on street use of LSD and other psychedelics, but they drastically terminated legitimate clinical research.

Those of us privileged to have personal experiences with psychedelics and to use them in our work, saw the great promise that these they represented not only for psychiatry, psychology, and psychotherapy, but also for modern society in general. We were deeply saddened by the mass hysteria that pervaded not only the lay population, but also the clinical and academic circles. It tragically compromised and criminalized tools with extraordinary therapeutic potential that properly understood and used had the power to counteract the destructive and self-destructive tendencies of the industrial civilization.

It was particularly heart-breaking to see the reaction of Albert Hofmann, the father of LSD and other psychedelics, as he watched his prodigious "wonder child" turn into a "problem child" (Hofmann 2005), I had the great privilege and pleasure to know Albert personally and meet him repeatedly on various occasions. Over the years, I developed great affection and deep admiration for him, not only as an outstanding and genuine scientist, but also as an extraordinary human being radiating astonishing vitality, curiosity, and love for all creation. I would like to briefly describe several of our meetings that have made a particularly deep impression on me.

I first met Albert in the late 1960s when he visited the newly built Maryland Psychiatric Research Center where we were conducting extensive research of psychedelic therapy. After spending some time with the members of our staff, Albert expressed interest to go sightseeing in Washington, D.C. and I offered to be his guide. We visited

the Capitol, Washington and Lincoln Monuments, the Reflecting Pool, and the tomb of J. F. Kennedy at Arlington Cemetery. It was April, the time of the National Cherry Blossom festival, and Albert, a passionate lover of nature, enjoyed immensely the beauty of the blossoming trees.

Before we returned to Baltimore, he expressed the desire to see the White House. At that time, pedestrians and cars were still permitted in the immediate proximity of the White House. I pulled to the curb and stopped the car. Albert rolled down the window, laid his hands on the edge of the glass panel, and looked for a while at the majestic building towering over the flower-decorated lawn. Then he turned to me and said with an almost child-like expression in his face: "So this is the great White House where important people like Richard Nixon and Spiro Agnew make the decisions that change the course of the world!"

Albert's comment and his humility astonished me. Nixon certainly was not one of the most admirable American presidents and Spiro Agnew, Nixon's Vice-President, was a third-rate politician who was later forced to resign because of charges of extortion, tax fraud, bribery, and conspiracy. I said to Albert: "Do you realize what impact you have had on the world as compared to Spiro Agnew?" In his modesty, Albert clearly did not realize and appreciate how his own discoveries had affected the lives of millions of people.

In 1988, my wife Christina and I had the chance to invite Albert to be the keynote speaker to the Tenth International Transpersonal Conference in Santa Rosa, CA, entitled The Transpersonal Vision: Past, Present, and Future. There is hardly any part of the world where Albert was and still is appreciated more than in California. A large number of Californians have experimented with LSD and other psychedelics as part of their spiritual journey and feel deeply grateful for the profound contribution it has made in their lives. Albert received enthusiastic welcome from conference participants and had a status of a rock star throughout this meeting.

Another of my memorable meetings with Albert occurred in the late years of his life when I was teaching an advanced training module for practitioners of Holotropic Breathwork entitled Fantastic Art. It was held in the H. R. Giger Museum in Gruyères and we had invited Albert to come and spend a day with our group as the guest of honor. After lunch, Hansruedi Giger - extraordinary fantastic realist painter, sculptor, and interior architect who in1980 had received the Oscar for the otherworldly creatures and environments he had created for the movie Alien - took us for a guided tour through his remarkable museum. We all were curious to see how Albert, a man of fine discriminating esthetic taste, would respond to Hansruedi's large-scale biomechanoid paintings, abounding with brutally realistic images of biological birth, explicit sexual imagery, and dark satanic and scatological motifs (Giger 1977). Albert's reaction was unequivocal - not only did he admire Hansruedi's artistic genius, but also the extraordinary power and authenticity with which his art portrayed the dark recesses of the human psyche that could be revealed during our inner journeys in the depth of the unconscious.

After his tour of the museum, Albert sat down with our group for a lecture and panel discussion. One of the most striking aspects of his personality was his passionate love of nature. As a child, Albert had a powerful mystical experience while walking in a meadow and his favorite pastime was spending time in nature, including his beautiful garden. During his professional life, his main interest was the chemistry of plants and animals. He conducted important research regarding the chemical structure of chitin, the main component of the cell walls of fungi and the exoskeletons of arthropods such as crustaceans (crabs, lobsters, and shrimp) and insects, for which in 1930 he received his doctorate. Later he studied the Mediterranean medicinal plant squill (Scilla glycosides) and elucidated the chemical structure of its common nucleus as part of a program to purify and synthesize active constituents of plants for use as pharmaceuticals. And, of course, he became world-famous for his research of ergot and lysergic acid derivatives that led to the discovery of LSD and for chemical identification of the active alkaloids of Psilocybin mushrooms *(teonanacatl)* and morning glory seeds *(ololiuqui).*

Albert talked about LSD in a way that was reminiscent of native cultures where psychedelic plants are seen as having certain characteristics of conscious beings. He shared with us his conviction that his discovery of psychedelic effects of LSD-25 was not an accident or even "serendipity" as he used to call it in his public lectures. In 1938, when he first synthesized LSD, he found it difficult to accept the conclusion of the pharmacological department of Sandoz that this substance did not have any properties warranting further research. As he continued to synthesize additional derivatives of lysergic acid, he could not get LSD-25 off his mind; he had a strong sense that the pharmacologists must have overlooked something when they were testing this particular substance.

By April 1943, this feeling became so compelling that he decided to synthesize another sample of LSD-25. This was very unusual - as a rule, experimental substances were definitely eliminated from the research program if they were found to be of no pharmacological interest. While working on this synthesis, Albert experienced the non-ordinary state of consciousness ("accidental intoxication") that led him to his famous self-experiment with 250 mcg of LSD (Hofmann 2005). His strong conviction that there was something special about LSD, finally culminating in the urge to synthesize another sample for deeper investigation, was difficult to explain rationally. Describing this sequence of events, Albert said: "I did not discover LSD; LSD found and called me."

Albert's presentation to our group in Gruyères turned into a passionate apotheosis of the beauty and mystery of nature and creation in general. He spoke about the miraculous chemistry that gives rise to the pigments responsible for the gorgeous colors of flowers and butterfly wings. He saw the intricacy of the chemical formulas responsible for the colors in nature as unmistakable proof that the universe had a master blueprint and was created by superior cosmic intelligence. Studying this remarkable alchemy of nature, he could sense the thoughts and the hand of the Creator. According to him, those who believe that atoms can do such things all by themselves do not know what they were talking about.

Albert also spoke at some length about the gratitude he felt for being alive and participating in the miracle of consciousness. He emphasized the need to embrace creation in its totality - including its shadow side - because without polarity the universe we live in could not have been created. When he left, we all felt that we just had attended a *darshan* with a spiritual teacher. It was clear that Albert had joined the group of great scientists -- like Albert Einstein and Isaac Newton –- whom rigorous pursuit of their discipline brought to the recognition of the miraculous divine order underlying the world of matter and the natural phenomena.

Several months after the Gruyères event, I returned to Switzerland to celebrate Albert's hundredth birthday. The morning celebration, in the Museum of Natural History in Basel, was a very official event, attended by many people from the psychedelic world, public figures, and Albert's friends. Swiss Bundespresident Moritz Leuenberger wrote a special letter for this occasion; he called Albert "a great figure in the exploration of human consciousness." In the evening, I was invited, along with my two friends and colleagues, Sonia and Juraj Styk, to a very different kind of celebration of Albert's birthday, held in an old inn in Berg, a small village on the Swiss-French border, where the Hofmanns lived. Children brought Albert flowers, recited poems, and sang songs. In this moving ceremony, we did not hear LSD mentioned once; we were not sure, if the villagers in Berg even knew what Albert had contributed to the world. They were just celebrating a wonderful neighbor who had reached the very respectable age of one hundred years.

The last time I had the chance to spend some time with Albert was two years later during the World Psychedelic Forum in Basel. His name was among the presenters, but he felt too week to come and give a lecture. Hansruedi and Carmen Giger, their assistant Stephan Stucki, and I were invited to visit Albert in his home in Berg. Although Albert's intellect was still very clear, his physical condition was rapidly deteriorating. We spent several precious hours with Albert revisiting old memories and listening to him as he was sharing with us his most recent philosophical and metaphysical ideas. I was very moved to hear that he had been reading daily passages from my book *The Ultimate Journey:*

Consciousness and the Mystery of Death (Grof 2006), which he kept on his bedside table. As we watched a beautiful sunset from the living room window, we were all very much aware that this was our last meeting and the end of an era. In view of Albert's long and productive life, we were experiencing very mixed feelings – deep sadness in anticipation of Albert's impending passing as well as celebration of a full and blessed life well spent. Albert died peacefully of a heart attack four weeks later.

However harsh and irrational were the administrative and legal measures against the personal and professional use of psychedelics, Albert never lost his faith in their therapeutic and spiritual potential and always hoped that scientific evidence would eventually prevail over mass hysteria. He continued to believe that one day these valuable tools would be again used with great benefit to human society. Thanks to his extraordinary vitality and longevity along with the determination and persistence of Rick Doblin and the Multidisciplinary Association for Psychedelic Research (MAPS), Albert was able to see toward the end of his life the beginning of a remarkable global renaissance of academic interest in psychedelic substances that included the resumption of LSD-assisted psychotherapy research.

In USA, several major universities have returned to psychedelic research – Harvard University, University of California Los Angeles (UCLA), Johns Hopkins University, New York University, University of California San Francisco (UCSF), University of Chicago, and University of Arizona Tucson. In Charleston, South Carolina, Dr. Michael Mithoefer and his wife Annie have reported positive results with the use of the entheogen MDMA (Ecstasy) in the treatment of post-traumatic stress disorder (PTSD) (Mithoefer et al. 2010). Their work could have important implications for solving the formidable problem of emotional disturbances in war veterans. And important psychedelic research is currently being conducted in Switzerland, Germany, Spain, England, Holland, Israel, Brazil, Peru, and many other countries of the world. The Seventeenth International Transpersonal Conference that took place in June 2010 in Moscow included a special track featuring the presentations of a new generation of psychedelic researchers.

While the renaissance of psychedelic research is very exciting, most of the new studies repeat with more rigorous scientific methodology the studies that had already been done in the past, including Walter Pahnke's Good Friday experiment that showed the entheogenic effects of psilocybin (Pahnke 1963), psychedelic therapy with cancer patients (Grof 2006), and administration of psychedelics to neurotic and alcoholic patients (Pahnke et al. 1970.). Among the notable exceptions are the use of the new imaging techniques in basic research exploring the effects of psychedelics on the brain and the pioneering and groundbreaking work with individuals suffering from PTSD (Mithoefer et al. 2010).

The promising results in the last category have the best chance to inspire clinicians worldwide and make this therapy mainstream. The problems with American soldiers returning from the Korean War, Vietnam War, Persian Gulf War, Afghanistan War, and Iraq War, have been truly formidable: insomnia, terrifying nightmares, depression, high rate of suicide, and outbursts of violence. Traditional therapies have proved to be painfully ineffective for these recalcitrant disorders. The challenge posed by PTSD for the Soviet and Russian Armies – although less publicized – has been equally enormous.

If the therapeutic effects of LSD and other psychedelics withstand the test of these new studies, the research will hopefully move into new exciting areas presently lacking scientific data but abounding with anecdotal evidence. The capacity of psychedelics to facilitate creativity is one of the most promising areas of investigation. In the 1960s, Willis Harman, Robert McKim, Robert Mogar James Fadiman, and Myron Stolaroff conducted a pilot study of the effects of psychedelics on the creative process. They administered LSD-25 and mescaline to a group of highly talented individuals and studied the effects of these substances on inspiration and problem-solving (Harman et al. 1966). In their book *Higher Creativity: Liberating the Unconscious for Breakthrough Insights*, Willis Harman and Howard Rheingold gave scores of examples of scientific and artistic breakthroughs that were facilitated by non-ordinary states of consciousness (Harman and Rheingold 1984). A program offering supervised psychedelic sessions to prominent researchers facing an impasse in their work on important projects and to prominent artists

could significantly advance scientific progress and foster unique contributions to our cultural life.

Already LSD has facilitated discoveries that subsequently received the highest scientific awards. In 1993, molecular biologist and DNA chemist Kary Mullis received a Nobel Prize for his development of the Polymerase Chain Reaction (PCR), a central technique in biochemistry and molecular biology that allows the amplification of specific DNA sequences. During a symposium in Basel celebrating Albert Hofmann's 100th anniversary, Albert revealed that Kary Mullis attributed his accomplishment to insights from his experience with LSD. Francis Crick, the father of modern genetics, was under the influence of LSD when he discovered the double-helix structure of DNA. He told a fellow scientist that he often used small doses of LSD to boost his power of thought. He said it was LSD that helped him to unravel the structure of DNA, the discovery that won him the Nobel Prize.

In his non-fiction book *What the Dormouse Said: How the Sixties Counterculture Shaped the Personal Computer Industry,* John Markoff described the history of the personal computer (Markoff 2005). He showed the direct connection between the use of psychedelics in the American counterculture of the 1950s and 1960s and the development of the computer industry. Steve Jobs said that taking LSD was among the two or three most important things he had done in his life." He noted that people in his staff, who did not share his countercultural roots, could not fully relate to his thinking. Douglas Engelbart, who invented the computer mouse, also explored and experimented with psychedelic drugs. Kevin Herbert, who worked for Cisco Systems in the early days, once said: "When I'm on LSD and hearing something that's pure rhythm, it takes me to another world and into another brain state where I've stopped thinking and started knowing." Mark Pesce, the co-inventor of virtual reality's coding language, VRML, agreed that there is a definite relationship between chemical mind expansion and advances in computer technology: "To a man and a woman, the people behind virtual reality were acidheads."

Albert Hofmann's "wonder child" thus helped other scientists solve

challenging problems and even receive the highest award in science - the Nobel Prize. Those scientists, who are not blinded by the stormy cultural controversy surrounding LSD-25, have no doubt that Albert Hofmann himself deserved the Nobel Prize for his brilliant and important discoveries. Unfortunately the sad irony – if not blunder – in the history of science is that the only Nobel Prize of relevance for psychiatry was awarded in 1949 to the Portuguese neurologist Antonio Edgar Moniz for the development of prefrontal lobotomy - a massive mutilating surgical intervention of questionable value and with serious side effects. This procedure was used especially during the period from the early 1940s to the mid-1950s for a wide range of conditions – psychosis, obsessive-compulsive disorder, depression, criminality, and aggressive behavior. The most infamous example of the use of lobotomy was Rosemary Kennedy, sister to John, Robert, and Edward Kennedy, who was given a lobotomy when her father complained to doctors about the mildly retarded girl's "embarrassing new interest in boys." Even in its greatly mitigated form (prefrontal or "icepick" lobotomy), this procedure was abandoned within a decade by the psychiatric profession.

Because of the unfortunate historical developments during the second half of the 20th century, mainstream academic circles have not recognized and acknowledged the importance of Albert's extraordinary and influential discoveries. And instead of honors and praise from his employer for his extraordinary achievements, he was blamed because the controversy associated with his discoveries had tarnished the reputation of Sandoz Pharmaceutical Company.

Human history features many great individuals – ground-breaking pioneers of various eras - who were not appreciated by their contemporaries, both the lay population and the scientific authorities of their time. Just to give a salient example: the heliocentric system of Nicolas Copernicus was not generally accepted until one hundred years after his epoch-making discovery. It is my firm belief that future generations will see Albert Hofmann as one the most influential scientists of the twentieth century, a Promethean visionary whose discoveries helped to chart a new trajectory not only for psychiatry, psychology, and neuroscience, but also for the evolution of the human species.

Literature:

Giger, H.R. 1977. **Necronomicon.** Basel: Sphinx Verlag.

Grof, S. 2001**. LSD Psychotherapy.** Sarasota, FL: MAPS Publications.

Grof, S. 2006. **When the Impossible Happens: Adventures in Non-Ordinary Realities.** Louisville, CO: Sounds True.

Grof, S. 2006**. The Ultimate Journey: Consciousness and the Mystery of Death** Sarasota, FL. : MAPS Publications.

Harman, W.W. et al. 1966. "Psychedelic Agents in Creative Problem-Solving: A Pilot Study". **Psychological Reports** 1966 Aug;19(1):211-2.

Harman, W.W. and Rheingold, H. 1984. **Higher Creativity: Liberating the Unconscious for Breakthrough Insights.** Los Angeles: J.P.Tarcher.

Hofmann, A. 2005. **LSD: My Problem Child**. Sarasota, FL: MAPS Publications.

Markoff, J. 2005. **What the Dormouse Said: How the Sixties Counterculture Shaped the Personal Computer Industry.** New York: Viking Press, Penguin Group (USA) Inc.

Mithoefer, M.C., et al. 2010. "The Safety and Efficacy of ±3,4-methylenedioxy-methamphetamine - Assisted Psychotherapy in Subjects with Chronic Treatment-Resistant Posttraumatic Stress Disorder: The First Randomized Controlled Pilot Study**." Journal of Psychopharmacology,** 19th July.

Pahnke, W. 1963. **Drugs and Mysticism: An Analysis of the Relationship between Psychedelic Drugs and the Mystical Consciousness.** Ph.D. dissertation. Harvard University.

Pahnke, W. et al: "The Experimental Use of Psychedelic (LSD) Psychotherapy." **JAMA** 212:1856, 1970.

Stoll, W. A. 1947. "LSD, ein Phantastikum aus der Mutterkorngruppe." **Schweiz. Arch. Neurol. Psychiat**. 60:279.

Wasson, G., Hofmann, A., and Ruck, C.A.P. 1978. **The Road to Eleusis: Unveiling the Secret of the Mysteries.** New York: Harcourt, Brace, and Jovanovitch.