

# Introduction

## Psychedelia's Third Wave

The discovery of psychedelics by the Western world was first met with wonder, followed by an excited anticipation of their potential as tools for exploring the mind and treating psychological disease, and then by misinformation, suspicion and suppression. Ignorance, misunderstanding and fear form a dark thread through the history of psychedelics in the late 20th century. Fortunately, this thread is finally beginning to fray.

—Andrew Gallimore, *Reality Switch Technologies*, 3–4

### First Wave (1940s–1950s)

Psychedelics are back. They never exactly went away, certainly not for many indigenous peoples with intact cultural lineages worldwide. But for the more economically developed countries (MEDCs) a major hiatus in their above-ground use ensued with the Johnson-era *Drug Abuse Control Amendments of 1965* (Public Law 89-74) and the more comprehensive Nixon-era *Controlled Substances Act of 1970* (Section 201 (c), (21 U.S.C. § 811 (c))), which banned psychedelics in most research venues and categorized them as “Schedule 1,” designating them as unsafe, with a “high potential for abuse” and lacking any legitimate medical use. Around this time, spurred by the United Nations *Convention on Psychotropic Substances* (1971), most other countries adopted similar bans. Previously, especially since the 1950s, there had been a great deal of institution-based research on psychedelics in both the West and former Soviet bloc, mostly concerning psychiatric applications of LSD and to a lesser extent mescaline.

This included large-scale covert military research, most notoriously the CIA's sinister Project MK-ULTRA (1953–1973), among whose victims were novelist and counter-cultural icon Ken Kesey, mathematician and terrorist Ted Kaczynski, Boston mobster Whitey Bulger, and, as is now known, cult leader and murderer Charles Manson. Also among the program's 149 clandestine subprojects were widespread abuses of prison inmates, including mind-bogglingly inhuman nonconsensual experiments, with LSD and other substances, on black prisoners in the Louisiana State Penitentiary from 1955 to 1956, conducted through Tulane University.<sup>5</sup> MK-ULTRA's abuses were revealed by Congress in the Church Committee hearings of the 1970s, bringing public attention to the need for ethics protocols to protect human subjects in government research.

As historian Mike Jay has documented, immediately prior to the first wave, there had been a noteworthy history of psychoactive compounds being explored by highbrow “psychonauts,” mostly via self-experimentation, such as Sigmund Freud (cocaine), William James (nitrous oxide), and W. B. Yeats (hashish).<sup>6</sup> But what became the most popular and emblematic “classic” psychedelic of the first and second waves, LSD, was not discovered until during World War II by Swiss chemist Albert Hofmann (1906–2008) as one of several synthetic ergot derivatives being investigated at Sandoz Laboratories, a chemical company based in Basel. Ergot is a toxic fungus afflicting rye and other grain crops exposed to excessive moisture, such as during early frosts. It had long plagued European harvests, particularly in cooler regions. When ingested, usually by peasants who could not afford to discard the fungally tainted “bread of the poor,” it caused the hallucinatory and sometimes lethal affliction medievals and early moderns knew as “St. Peter’s snow” or “St. Anthony’s fire,” among other names.<sup>7</sup> It was a probable cause of periodic outbreaks of ecstatic fervor, including violent witch manias, as late as the Salem witch trials in 1692, according to the analysis of historian Mary Matossian.<sup>8</sup> LSD’s curious psychotropic properties became known by Hofmann himself when he took a leap of faith one April afternoon in 1943 and, out of scientific curiosity, dosed himself with it and then took a very strange bicycle ride home that has become iconic in psychedelic lore.<sup>9</sup> (“Bicycle Day” is now celebrated by psychedelics enthusiasts every April 19.) Sandoz eventually began offering free samples of LSD to researchers worldwide in hopes finding commercial uses—a kind of early crowdsourcing—an offer especially taken up in the former Soviet bloc, which gave rise to large-scale research there among psychiatrists,

particularly focusing on alcoholism and depression. This included the influential maverick Czech (and later American) psychiatrist Stanislav Grof (b. 1931) ([stangrof.com](http://stangrof.com)), who supervised thousands of LSD-assisted therapy sessions in the 1950s and 1960s and later became a founder of transpersonal psychology. From these sessions, Grof distilled a framework for understanding the psychological patterns he observed within LSD and other non-ordinary experiences, in particular what he terms “perinatal matrices” having to do with the reliving of birth trauma. After the outlawing of LSD for research, Grof developed “holotropic breathwork” as a non-chemical mechanism for altering consciousness.<sup>10</sup>

Prior even to LSD, another powerful psychedelic, mescaline, was originally derived from the columnar cactus of Peru and the peyote and San Pedro cacti of the Mexican and American desert Southwest. It had long been present among the indigenous people of the New World at the time of the Spanish Conquest and was actively suppressed by missionaries and viceroys. Peruvian, North American, and European researchers eventually learned of the mescaline-yielding plants and the compound was fully lab synthesized by Austrian chemist Ernst Späth (1886–1946) in 1919. (It had been extracted from peyote by German chemists in the early 1900s.) Soon thereafter, mescaline was manufactured and distributed by the German pharmaceutical giant Merck and it then served as an entrée into psychedelics for a continental milieu of intellectuals and avant-gardists.<sup>11</sup> This included German philosophers Ernst Bloch (1885–1977) and Walter Benjamin (1892–1940), French Surrealist poet Antonin Artaud (1896–1948), and French philosopher Jean-Paul Sartre (1905–1980).<sup>12</sup> Sartre’s psychedelic foray was short-lived. After a massive overdose of mescaline in 1935, the future Nobel Prize awardee spent a bizarre and terrified year convinced he was being followed around Paris by giant lobsters.<sup>13</sup> It is hard not to see the hand of his earlier psychedelic experiences just a few short years later, in the novel that launched existentialism, *Nausea* (1938). In the famous mirror scene, Sartre’s protagonist confronts his own visage in a suspiciously mescaline-like manner, losing his grip on reality:

What I see is well below the monkey, on the fringe of the vegetable world, at the level of jellyfish. It is alive, I can’t say it isn’t. . . . I see a slight tremor, I see the insipid flesh blossoming and palpitating with abandon. The eyes especially are horrible when seen so close. They are glassy, soft, blind,

red-rimmed, they look like fish scales. . . . The eyes, nose and mouth disappear: nothing human is left. Brown wrinkles show on each side of the feverish swelled lips, crevices, mole holes. A silky white down covers the great slopes of the cheeks, two hairs protrude from the nostrils: it is a geological embossed map. And, in spite of everything, this lunar world is familiar to me. I cannot say I *recognize* the details. But the whole thing gives me an impression of something seen before which stupefies me.<sup>14</sup>

This may be the most famous depiction of a “bad trip” in the history of philosophy. Mescaline was also the experiential basis for English author Aldous Huxley’s (1894–1963) classic psychedelic-themed trilogy *Doors of Perception* (1954), *Heaven and Hell* (1956), and *Island* (1962). Huxley was so devoted to psychedelics that he requested LSD from his wife and took it during his last hours on his deathbed.<sup>15</sup>

Along with mescaline and LSD, the other main psychedelic of the first wave was so-called “magic mushrooms,” whose main psychoactive ingredient via oral ingestion is the alkaloid psilocybin (which breaks down via digestion into its psychoactive counterpart psilocin). Though psychedelic mushrooms are ubiquitous worldwide, their unusual properties had long been mostly forgotten in the MEDCs, despite ample evidence of their use in ancient Europe and elsewhere. The most familiar of these is the iconic red-capped and white-spotted toadstool *Amanita muscaria* (or fly agaric), which is moderately poisonous but also contains a non-psilocybin hallucinogen (muscimol, which operates along different neural pathways from psilocin). It is curiously prominent in older religious imagery and fairy tales such as that of Santa Claus (Siberian shamans filter it through reindeer urine).<sup>16</sup> Psychoactive mushrooms of the psilocybin variety were brought to modern mainstream attention by way of Gordon Wasson (1898–1986), an eccentric polymath who was, at different periods, a Columbia University English professor, a J.P. Morgan executive, and, later in life, an amateur ethnobotanist and anthropologist. Wasson and his wife, Russian pediatrician Valentina Pavlovna Wasson (1901–1958), popularized mushrooms in North America via a 1957 *This Week* magazine article documenting their participation in a traditional mushroom ceremony in Oaxaca, Mexico, conducted by the now-famous Mazatec *curandera* María Sabina (1894–1985).<sup>17</sup> Psilocybin was later synthesized for research purposes by Hofmann at Sandoz (modern research on psi-

locybin is usually conducted by injection with the synthesized form, as this allows for precise dosing).

Worth noting in any discussion of the recent history of psychedelics is that, in an unfortunate echo of colonialism, the Wassons' Oaxacan adventure ended up being damaging to Sabina and her family, as Wasson seems to have inadequately safeguarded Sabina's confidentiality. This resulted in hostility from local authorities and unwanted and destructive tourism when the magazine piece placed Sabina's remote mountain village (Huautla de Jiménez) in the public eye.<sup>18</sup> This extractivist pattern of cultural and environmental damage, however inadvertent in this case, should be kept firmly in mind. Indigenous peoples' ancestral knowledge continues to be appropriated in ways that are often reckless and harmful. Along these lines, two current environmental concerns in desert areas of the southwestern US and northern Mexico are the endangered status of the mescaline-yielding peyote cactus and the Sonoran Desert toad, whose venom is one of the primary sources of 5-MeO-DMT. Nicknamed the "God molecule," 5-MeO-DMT is arguably the most powerful known psychedelic. It is finally now being widely acknowledged how the *curanderos* of Amazonia and Mexico (and shamanistic figures around the globe) have served to preserve the knowledge of these essential substances, not unlike the role played by monastery monks (and other scholars) in preserving literacy and classical learning during the European Dark Ages. Without this appropriated knowledge, the current psychedelic renaissance would not have been possible or even, really, imaginable. While organizations such as the International Center for Ethnobotanical Education, Research, and Service ([iceers.org](http://iceers.org)) and the Chacruna Institute for Psychedelic Plant Medicines ([chacruna.net](http://chacruna.net)) have arisen to assist in safeguarding these interests, the indigenous and environmental impacts of psychedelics' globalization remain concerning.

### Second Wave (1960s–1970s)

In the decades that followed the first-wave psychedelic discoveries of the German mescaline chemists, Hofmann, and Wasson et al., a second wave ensued that was characterized by a bursting forth of psychedelia onto the vast canvas of popular culture. Before the mid-1960s, psychedelics tended to be limited to the above-mentioned avant-garde figures such as Huxley and miscellaneous creative types such as writer and artist

William S. Burroughs (1914–1997), who experimented with mescaline, LSD, and even a version of ayahuasca in the Amazon.<sup>19</sup> There were in addition high-profile Hollywood notables like film director Stanley Kubrick (1928–1999) and actor Cary Grant (1904–1986), the latter undergoing around one hundred LSD therapy sessions at the Beverly Hills Psychiatric Institute. Grant claimed that LSD “saved my life.”<sup>20</sup> Also part of this emergent southern California scene, many early LSD sessions were also conducted at UCLA by psychiatrist Sidney Cohen (1910–1987), whose patients included Bill Wilson, the founder of Alcoholics Anonymous. Wilson became convinced that LSD was the best way to treat alcoholism by providing the non-religious with a vivid sense of the “higher power” necessary in twelve-step programs (his contemporaries in AA were hostile to the strategy of using one drug to overcome another).<sup>21</sup> Cohen, along with English/Canadian psychiatrist Humphrey Osmond (1917–2004), who coined the term “psychedelic” in correspondence with Huxley, were part of Huxley’s circle.<sup>22</sup>

Things then radically changed as psychedelics exploded into popular consciousness in the 1960s via cultural entrepreneurs such as Ken Kesey, with his proto-hippie Bay Area entourage known as the Merry Pranksters and their warehouse “acid test” parties—with music provided by an upstart local band eventually called the Grateful Dead.<sup>23</sup> Other noteworthy popularizers included Harvard psychologists Timothy Leary (1920–1996), Richard Alpert (later Ram Dass, 1931–2019), and Ralph Metzner (1936–2019), and—not to be forgotten—some enterprising underground distributors and chemists. These latter included a motley assemblage of colorful individuals, such as the shadowy inventor, bootlegger and intelligence operative “Captain” Al Hubbard, dubbed the “Johnny Appleseed of LSD,” who widely distributed Sandoz-created LSD worldwide, and the clandestine chemist and Grateful Dead sound engineer “Acid King” Stanley Owsley, the first known freelancer to produce LSD, by his own admission creating 5 million doses between 1965 and 1967.<sup>24</sup> A few years later there was also the prolific renegade chemist, initially at Dow Chemical and the DEA, Alexander Shulgin (1925–2014), who introduced the empathogen MDMA to therapists and discovered many compounds such as the psychedelic phenethylamine 2C-B.<sup>25</sup> In large part due to bridging figures such as these, psychedelia soon bolted from the corporate chemistry labs and elite intellectual circles to become near ubiquitous in the MEDCs. To say the least, psychedelics and their associated aesthetics profoundly shaped the 1960s in art, music, literature,

politics and, really, the entire vast hippie and hippie-adjacent cultural scene, including a vibrant and roughly concurrent Black Psychedelia, associated with Sly and the Family Stone, George Clinton, and many others. Perhaps the cultural apotheosis was reached with the release of the Beatles' chart-topping concept album *Sgt. Pepper's Lonely Hearts Club Band* (1967), one of the best-selling albums of all-time, which did not even pretend to disguise its essence as an intricate ode to LSD.<sup>26</sup>

Yet as Leary's ludic slogan "turn on, tune in, drop out" permeated the counterculture, and that counterculture then dovetailed with anti-Vietnam War sentiment and political protest, the subsequent Nixonian normie backlash was all but guaranteed. The whole emergent ragtag ensemble—from Haight-Ashbury to Woodstock—appeared alien and menacing to traditional straitlaced America. The hallucinogenic drugs that seemed to have corrupted the minds of large segments of American youth—particularly among the affluent and college-educated—had to be contained to halt a generation feared by older mainstream authorities to be literally out of control. Authorities coalesced against this cultural threat and ultimately the naïve and laid-back "Age of Aquarius" hippie vibe was no match for their multi-pronged onslaught. The psychedelic utopianism of the 1960s thus gave way—with powerful assists from heavily negative press coverage (sometimes warranted) and from events themselves, like the murders perpetrated by Manson's California LSD cult—to the disillusionment and cultural and spiritual fragmentation of the 1970s and beyond. Psychedelia then became on the whole less collective and publicly visible and more privatized and introspective, inflected with more of a self-help New Age spiritualist ethos than with the "we can change the world" mood of the 1960s.<sup>27</sup> Gonzo journalist and drug enthusiast Hunter S. Thompson summarized this rather abrupt cultural turn in his inimitable style: "That was the fatal flaw in Tim Leary's trip. He crashed around America selling 'consciousness expansion' without ever giving a thought to the grim meat-hook realities that were lying in wait for all the people who took him seriously. . . . All those pathetically eager acid freaks who thought they could buy Peace and Understanding for three bucks a hit."<sup>28</sup>

The Nixonian backlash period also resulted in the termination of almost all ongoing above-ground research on psychedelics, much of it focused on as alcoholism, drug addiction, and mental illness. The Maryland Psychiatric Research Center (an extension of previous work done at the Spring Grove State Hospital near Baltimore) was the last

outpost of LSD research until it too was scuppered in 1975. What came to be known as the “war on drugs” thus pushed psychedelics—and the knowledge base that had been accumulating since the first wave—almost completely underground. While psychedelics were never eradicated and continued to exert strong influences on pockets of the culture, particularly among the artistic, musical, and zine subcultures of this period, political demonization and increasingly aggressive drug enforcement succeeded in stigmatizing them such that psychedelics were placed mostly out of bounds for polite society and “respectable” scholars.<sup>29</sup> As a result, for a generation, from the early 1970s to the 1990s, academics whose research took these substances seriously, even in remote contexts such as ancient history, like Boston University classicist Carl A. P. Ruck (b. 1935), found themselves ostracized and professionally blackballed. Conventional wisdom and the police power of the state together erected a powerful wall of taboo and fear that stood firmly in place for decades.

### Third Wave (1990s–present)

This deflationary period lasted for a generation until a third wave began to form.<sup>30</sup> Integral to this process were two harbingers of a new sensibility toward psychedelics who are hard to categorize but were (and are) massively influential: speculative thinker and essayist Terence McKenna (1946–2000) and the non-affiliated mycologist Paul Stamets (b. 1955).

McKenna, brother of the noted ethnopharmacologist Dennis McKenna (b. 1950),<sup>31</sup> was a prolific writer but perhaps was—and still is—mostly encountered via his talks and lectures, where he employs a singular voice and speaking style that combines personal psychonautical tales with wry humor and a brainy playfulness. McKenna vividly conveys that psychedelics are not just aesthetic and spiritual tools but they also invite an intellectual adventure that can help us grapple with deep questions about human existence.<sup>32</sup> Still much discussed is his highly speculative (and hyperbolically named) “stoned ape theory” that suggests psychedelic mushrooms were key catalysts for human brain development and consciousness, particularly alongside the human expansion out of Africa. This journey, so the theory goes, involved hunter-gatherers’ wider search for food sources. If one tracks animals for a living, one becomes intimately acquainted with animal scat, which, under certain conditions, serves as a fecund substrate for psychoactive *Psilocybe cubensis* mushrooms.



It is difficult to imagine that archaic humans did not stumble across these dung-growing psychedelics and eventually, with the development of agriculture and the domestication of cattle, the requisite dung became all the more ubiquitous. Cow and horse dung are still a major substrate for *Psilocybe cubensis*. I personally recall undergraduate students in 1980s Austin, Texas, collecting garbage bags full of *Psilocybe cubensis* from local pastures in springtime—while keeping lookout against farmers intent on chasing off “the hippies.” Unbeknownst to them, according to McKenna, these students may have been engaging in one of the most ancient of psychedelic traditions. This theory remains highly speculative and it has not gained much traction among mainstream academics. It is, however, a typical kind of thought exercise for McKenna, who was self-aware enough not to claim he was “proving” a thesis like this and was merely, as he did across a wide range of topics, inviting engagement and curiosity—which he certainly has. It is an interesting intellectual role to play in the culture, one that the incentive structure of contemporary academia mostly discourages.

More soberly scientific than speculative and literary, Stamets represents a rare type in the modern era, a “gentleman scholar” throwback to earlier periods in the history of science: the high-level self-taught amateur who, as an academic outsider, nonetheless makes important contributions to the field. Regularly cited in the scholarly literature, he was recognized in 2014 as an “Innovation Ambassador” by the American Academy for the Advancement of Science for his work on subterranean fungal networks and his many mushroom-related patents.<sup>33</sup> Stamets’s research, writings, and online lectures have served as key resources for mycologists and for the psychedelic community.<sup>34</sup> In his bestselling 2020 book, *Entangled Life: How Fungi Make Our Worlds, Change Our Minds and Shape Our Futures*, Cambridge biologist Merlin Sheldrake recognizes that Stamets’s “definitive” works “continue to provide a crucial reference for countless mycologists, grassroots or otherwise,” and that Stamets “has done more than anyone else to popularize fungal topics outside university biology departments.”<sup>35</sup>

Inspired by these and other forerunners, the third wave proper began in the 1990s with the visionary efforts of above-ground medical researchers, especially psychiatrist Rick Strassman (b. 1952) at the University of New Mexico and, a few years later, neuroscientist Roland Griffiths (1946–2023) at Johns Hopkins University.<sup>36</sup> Ironically funding his initial research from federal “war on drugs” programs, Strassman worked with

the powerful psychedelic tryptamine DMT. DMT is a naturally occurring compound endogenous to humans and other mammals and was discovered by scientists at various stages at midcentury (its hallucinogenic properties were discovered in the modernist West by Hungarian chemist Stephen Szára in 1956).<sup>37</sup> This discovery again occurred with an assist from several indigenous Amazonian peoples who have long utilized it, most famously in the form of ayahuasca, a tea ingeniously combining the DMT-laden leaves from particular rainforest plant species with the bark of a certain liana vine that inhibits DMT's normal breakdown in digestion. (DMT can be chemically synthesized as well.) This compound, along with others such as psilocybin/psilocin and LSD, was reliably provided during these decades to researchers such as Strassman and Griffiths through the rigorous efforts of the unassuming yet quietly radical chemist David Nichols at Purdue University's College of Pharmacy. (Nichols is a relatively unsung hero of psychedelia's third wave, characterized as it has been by a cautious securing of academic legitimacy—as unlike Timothy Leary as it could be.)<sup>38</sup> Along with UCLA psychiatrist Charles Grob (b. 1950) during the early 2000s, Griffiths conducted his experiments at Johns Hopkins mostly with mushroom-derived psilocybin. Strassman and Griffiths administered these serotonergic tryptamine compounds via injection to patients in therapeutic settings and achieved highly noteworthy results almost immediately. In their psilocybin trials, for example, Griffiths and Grob and colleagues were able significantly and durably to reduce death anxiety in terminal cancer patients and to help alleviate generalized anxiety, depression, PTSD, and various addictions at rates far higher than other known treatments.<sup>39</sup> Ongoing studies like these have created an atmosphere of legitimacy and optimism, and, as their results have filtered through the popular press, have greatly increased public curiosity concerning psychedelics research.

Although they are still illegal in most jurisdictions, psychedelics' general reputation and legal status have continued to evolve at a rapid pace since the initial findings by Strassman and Griffiths. Every month seems to bring news of new studies and potential applications. Major psychedelics research operations now include, not only Johns Hopkins Center for Psychedelic and Consciousness Research ([hopkinspsychedelic.org](http://hopkinspsychedelic.org)), but Imperial College of London's Centre for Psychedelic Research ([www.imperial.ac.uk/psychedelic-research-centre/](http://www.imperial.ac.uk/psychedelic-research-centre/)), New York University's Center for Psychedelic Medicine ([med.nyu.edu/departments-institutes/psychiatry/research/center-psychedelic-medicine](http://med.nyu.edu/departments-institutes/psychiatry/research/center-psychedelic-medicine)), and many other

prominent research centers, including Harvard, Yale, UCLA, Wisconsin, Mount Sinai School of Medicine (New York), Baylor College of Medicine (Houston), and Massachusetts General Hospital (Boston).<sup>40</sup> (At this point it seems difficult to find a prestigious university that is not at least planning to open a new psychedelics research unit, as are, for example, the University of Texas at Austin and the Berkeley, San Francisco, and San Diego campuses of the University of California.) Finding early funding through independent research foundations such as the Multidisciplinary Association for Psychedelic Studies ([maps.org](https://maps.org)) and the Beckley Foundation (UK) ([beckleyfoundation.org](https://beckleyfoundation.org)), these efforts involve a range of drugs, especially MDMA and psilocybin, both of which seem poised to win Federal Drug Administration approval for PTSD and other treatments.<sup>41</sup>

Along with this burgeoning research activity, there is currently a strong trend toward decriminalization and legalization of psychedelics, spearheaded by a few countries like Canada and Australia (MDMA and psilocybin), and some US cities and states (largely modeled on cannabis legalization), most notably at present in Colorado and Oregon, where, post-legalization (via statewide referendum), regulatory frameworks for the therapeutic use of psilocybin are underway, as well as large amounts of private investment capital currently flowing into psychedelics research (there are now many publicly traded psychedelics startup companies).<sup>42</sup> In 2022 the Biden Administration, via the Assistant Secretary for Mental Health and Substance Use (US Department of Health and Human Services), announced it was considering a “Federal Task Force” on the “complex issues” around “emerging substances such as MDMA and psilocybin.”<sup>43</sup> Also at the federal level, a bipartisan Congressional Caucus to explore psychedelics research was launched in 2022.<sup>44</sup> It should also be noted that there is a wide and ever-expanding variety of additional psychedelics currently being prescribed and researched. Among the best known of these are ketamine, a synthetic hallucinogen currently used above-ground to treat anxiety and depression at clinics nationwide, and, at an earlier stage of research, ibogaine, a very powerful botanical psychedelic from the environs of Gabon in West Central Africa, which is currently being investigated for the treatment of opioid addiction.<sup>45</sup> Though ibogaine has long been known in Central Africa, it has been little researched thus far; its safety and therapeutic efficacy remain uncertain.

Considering these shifting pharmaceutical sands, one may summarize that, whereas the first psychedelic wave was characterized mostly by mes-

caline and LSD and the second wave by LSD and mushrooms, the third wave is characterized by mushrooms, DMT/ayahuasca, and a heightened curiosity and innovation regarding additional compounds. (Though it has its advantages in terms of ease of use and is still prevalent, LSD is less popular in research and recreation because of its lengthy time of action: around twelve to fourteen hours, compared to around four to six hours for mushrooms and ayahuasca and a mere fifteen to thirty minutes for inhaled DMT.) Psychedelia is rapidly becoming more variegated and complex, as private investor and researcher activities continue to expand in this space, including the ongoing synthesis and discovery of new psychedelic compounds. Appropriately, skeptical voices still urge caution, but overall popular sentiment—particularly among the young and the non-religious—seems also to have shifted more favorably toward psychedelics, as evidenced by increased usage among adults, including the rise in certain fashionable circles of “wellness” approaches involving so-called “micro-dosing” (usually psilocybin or LSD).<sup>46</sup> Psychedelics’ improved reputation has also been enhanced by an outpouring of sympathetic journalism, spearheaded by the high-profile articles, books, and Netflix series by bestselling science journalist Michael Pollan (b. 1955) ([michaelpollan.com](http://michaelpollan.com)). New media is also awash in psychedelics conversation, headlined by comedian and DMT booster Joe Rogan (b. 1967), purveyor of the world’s most downloaded podcast, where prominent psychedelics researchers and experiencers have been regularly featured in long-form interviews. And social media platforms are replete with psychedelic resources. Notable among these are emerging digital artists who have skillfully replicated the visual and auditory sensations associated with DMT and other psychedelic experiences: see for example the astonishingly accurate trip simulations on the YouTube channel Symmetric Vision ([www.youtube.com/@SymmetricVision](http://www.youtube.com/@SymmetricVision)). Mainstreaming is further fostered by major sports figures such as world champion boxer Mike Tyson (DMT and 5-MeO-DMT) and football quarterback Aaron Rodgers (ayahuasca), who have publicly lauded their psychedelic experiences, Rodgers going so far as to credit ayahuasca for his back-to-back NFL MVP awards in 2020 and 2021.<sup>47</sup>

As a result of these developments, it no longer comes across as eccentric to study psychedelics, and the flood gates are opening in both academia and the culture at large. An exciting aspect of this phenomenon in academia is the interdisciplinarity permeating this area of study. Just about every academic discipline is implicated in some way or other,

beginning with the STEM fields, particularly chemistry, biology, and medicine (especially psychiatry, psychology, and neuroscience). Psychedelics are also being approached anew across the arts and humanities, social sciences, and applied fields: from botany to classics, psychology to philosophy, education to archaeology, nursing to theology, anthropology to legal studies, journalism to ethnic and area studies—to name just a few. There is a bull rush of journal articles and books across all of these fields and others. This includes urgent and manifold ethical and equity concerns, such as the aforementioned situation of indigenous peoples, environmental and species endangerment, and the alarming potential for patient/client abuse in therapeutic settings. As articulated by Columbia University psychiatrist and drug addiction researcher Carl Hart, there are also critiques of class snobbery in the “psychedelic chauvinism” alleged in the bourgeois elevation of psychedelics as agents of spiritual enlightenment in heightened contrast to the scary “bad people” street drugs of abuse like opioids and methamphetamine—with matching drug enforcement and sentencing biases.<sup>48</sup> Relatedly, there are also edgier legal and political debates around “cognitive liberty” or “neurocognitive self-determination,” that is, the freedom to alter one’s own consciousness, with sufficient resonance to preoccupy both libertarians and intersectionalists alike.<sup>49</sup> The list goes on. We are already seeing papers on the “queering of psychedelics” and cis normativity, as in “how psychedelics can help with gender identity and transition.”<sup>50</sup> As an area study, psychedelia is truly becoming a full-service microcosm of academic trends.

And as noted regarding Stamets, research innovation has not been limited to the university. As have other fields, for example archaeology and botany, psychedelics is amassing a tradition of valuable amateur contributions. A striking recent case is the physical substantiation of long-held suspicions of ancient Greek ceremonial use associated with the Eleusinian Mysteries by a determined attorney and amateur classicist, Brian Muraresku ([brianmuraresku.com](http://brianmuraresku.com)). (Muraresku discovered “psychedelic beer” chemical residue in ceremonial chalices at a Greek outpost in Catalonia, Spain.)<sup>51</sup> At the experiential level, because of their long periods of illegality, the knowledge base of the effects of psychedelics continues to be highly indebted to amateur psychonauts and others. In terms of the first-person cataloging of events, individual users have copiously chronicled their experiences via crowd-sourced online databases like the trip reports meticulously cataloged at Erowid ([erowid.org](http://erowid.org)), an invaluable resource for curious members of the public and academics

alike. These “experience reports” remain valuable data reservoirs because the legal and scientific machinery of institutional research grinds far too slowly to keep full pace with the wild proliferation of new compounds and novel usage practices. (There are *many* more, lesser-known psychedelic compounds currently being used informally than the more famous classic psychedelics discussed in this book.) Along these same lines, there are publicly accessible ongoing analyses of a wide range of psychedelic compounds, such as that provided by Mindstate Design Labs (UK) psychedelics researcher (and YouTuber) Josie Kins, who has developed a helpful Subjective Effects Index (EffectIndex.com), “which features a granular taxonomy of the subjective psychedelic experience” aimed at “developing a universal terminology set for discussing and describing that which was previously ineffable.”<sup>52</sup> Kins’s ongoing experiential database and associated frameworks are the most comprehensive currently available (I utilize her work in chapter 2).<sup>53</sup> There are also exemplars of extremely effective public communication about psychedelic science, such as neuroscientist Manesh Girm’s valuable YouTube channel and podcast “The Psychedelic Scientist” ([www.youtube.com/@ThePsychedelicScientist](http://www.youtube.com/@ThePsychedelicScientist)), which provides highly accessible content on a range of relevant topics.

As important for third-wave psychedelia as academic research is the religious and spiritual front, where psychedelics are tied to sacramental “entheogenic” usage by indigenous groups and both traditional and emergent religious communities.<sup>54</sup> In the US, the pan-tribal Native American Church (NAC), among whose founders was the important historical figure—and peyote devotee—Comanche Chief Quanah Parker (c. 1845–1911), has long used peyote as part of its sacred rituals and has undergone a winding path toward securing the legal status to use it as part of their free exercise of religion.<sup>55</sup> Specifically exempted from drug enforcement actions by the DEA since 1981, the NAC’s right to use peyote is now safeguarded by federal statute as part of the Religious Freedom Restoration Act of 1993 (P.L. 103-141). A highly noteworthy additional legal accommodation of entheogenic psychedelic use is the unanimous 2006 Supreme Court ruling in favor of the União do Vegetal (UDV) Church’s right to use DMT-containing ayahuasca and, a few years later, the extension by a federal appeals court of an analogous right, also with ayahuasca tea, to members of the Brazilian Santo Daime religion.<sup>56</sup> A major First Amendment Free Exercise Clause carve-out has thus emerged for native religions to use psychedelics ceremonially within their churches, at least from traditional and low-abuse-potential

sources like peyote and ayahuasca. As discussed in later chapters, the next legal frontier has to do with non-indigenous congregations and individuals—including the question of what exactly defines a constitutionally qualifying “religion”—and how future religious exemptions might be extended.<sup>57</sup> It is a complex legal situation involving a number of factors and at present it is unclear how this area of law will evolve. What is clear, however, is that the psychedelics exemption for indigenous religions is a significant development that was unthinkable until recently. Depending on the slipperiness of its slope, it is bound to have an influence on the culture at large. At present there is no documented harm from their traditional usage of “plant medicines” to long-time NAC, UDV, or Santo Daime congregants that would justify restrictions on safety grounds. These communities’ ongoing psychedelic practices may therefore be able to provide tradition-based models of responsible use based on collective responsibility and culturally resonant post-experience psychological integration.

On a much larger potential scale, there are already religionists more mainstream to American traditions incorporating psychedelics as entheogens, for example the Shefa Jewish congregation in the Bay Area ([shefaflow.org](http://shefaflow.org)) and the Ligare Christian Society based in Savannah, Georgia ([ligare.org](http://ligare.org)). In a sense, these contemporary groups build on older insights from the famous Good Friday Experiment, conducted in 1962 by Harvard psychiatrist Walter Pahnke (1931–1971) as part of his religious studies doctoral thesis, in which theology students were given psilocybin at Boston University’s White Marsh Chapel. As against a placebo group, almost all of the student-participants reported Christianity-inflected “mystical” experiences, thus reinforcing psychedelics’ entheogenic capabilities within the context of an individual’s particular religious background experience and predilections.<sup>58</sup> In this connection, it is worth noting that these entheogenic aspects have been an important focus of widely read thinkers in the field of religion, such as MIT and University of California philosopher of religion Huston Smith (1919–2016), himself a participant in Pahnke’s experiment, and the influential Buddhist writer and teacher Alan Watts (1915–1973).<sup>59</sup> It should be noted that there are also strong suggestions of traditions of psychedelic usage in Islam, especially among Sufi mystics.<sup>60</sup>

To summarize, the most visible currents in the ongoing third wave of psychedelia involve 1) a burgeoning global medical-therapeutic research nexus increasingly characterized by commercial interests, 2) academic

attention across a wide range of additional fields, 3) increasing visibility across popular culture, and 4) in the US, at least, a growing legal religious accommodationism centered around indigenous communities, but possibly poised for extension by a US Supreme Court friendly to the free exercise of religion.

### Beneath the Wave

To deny philosophers of mind psychedelic substances is tantamount to denying instruments to musicians.

—Peter Sjöstedt-Hughes, *Noumenautics*, i

But this is only the visible surface of the third wave. There also persists what has always been quantitatively by far the largest current of psychedelic use, that variously designated as “informal,” “recreational,” or illicit use. Spurred perhaps by the legitimating aura emanating from the medical and religious areas described above, psychedelic use is currently on the rise among adults, according to 2022 polling. Over a quarter of Americans surveyed report they have tried at least one “real” psychedelic drug such as mushrooms, LSD, or DMT (i.e., not just cannabis), including significantly higher percentages among millennials (35–44) and the college-educated.<sup>61</sup> A National Institutes of Health survey finds that “hallucinogen use among young adults [19–30] reached [an] all-time high in 2021,” with usage almost tripling in the last decade.<sup>62</sup> These are mostly private individuals and small groups of friends ingesting psychedelics for entertainment and/or personal growth. As they are neither members of indigenous communities nor, for the most, part ingesting psychedelics to address a specific trauma, addiction, or mental illness, they are essentially making well visits to the psychedelic realm. These visits are sometimes undertaken for considered intellectual, spiritual, or wellness reasons but sometimes not for any “serious” reason at all. Though with these powerful substances, intent and outcome are assuredly not identical, as it is very possible to enter into it in one frame of mind and come out of it with a decidedly different one; while there are patterns to these experiences, they are never wholly predictable. As religion scholar Erik Davis ([techgnosis.com](http://techgnosis.com)) comments, “some psychedelic trips—they begin as a lark, a perceptual *dérive*, and end up with gods and devils and the



screaming abyss.”<sup>63</sup> Whatever users’ intents and outcomes, the overwhelming majority of psychedelic usage is conducted in non-ceremonial and non-medical informal venues.

What about the experiences of this majority of extra-legal experiencers? Surely it would not be justified to sideline inquiry into them for reasons of respectability—or even safety: if there is something dangerous going on in society it should be studied from multiple perspectives. Just as urgently, a large number of individuals—some of them very young—are seeking psychedelic experiences to learn something about their lives and life in general, and many of them claim to have done just that, even if they usually have trouble articulating it. What precisely might they be learning?

This is where education and philosophy can serve important roles, not just for the benefit of knowledge accumulation for its own sake and/or authorities’ regulatory designs, but also, it is to be hoped, for enhancing the self-understanding of the experiencers themselves. Putting “party drug” uses aside—while remaining mindful that play can have its serious sides—it is striking how typical it is for psychedelic users to report they have undergone significant and even profound *learning* experiences, either during the trip itself and/or in the course of psychologically integrating the experience afterwards. These are situations not necessarily specific to recovery from X, Y, or Z condition or trauma or understood through the ceremonial scripts of X, Y, or Z religious tradition. But nonetheless they culminate in an “afterglow” feeling—of indeterminate duration—of having gained worthwhile insights of great personal significance, often a hard-to-articulate existential gestalt shift in self-understanding and an altered perception of one’s place within a larger scheme of things. At the more meaningful end of the spectrum, psychedelic experiences thus commonly possess a decidedly *educational* if not inchoate *philosophical* character, one not reducible to their cognitive, aesthetic or emotional character. Philosophers have begun to explore this territory, with compelling pioneering work by Australian philosopher Chris Letheby (University of Western Australia) in the philosophy of mind, British philosopher Peter Sjöstedt-Hughes (University of Exeter) in the history of philosophy and how philosophy can be utilized in the psychedelic therapy context, and, a bit earlier, Canadian philosopher of education Kenneth Tupper (University of British Columbia [plantteachers.com]), who was an early advocate for considering psychedelics as “cognitive tools” for catalyzing educational experiences of “wonder and awe.”<sup>64</sup>

But such inquiries are only beginning. And this is as it should be, for, properly understood, this is not a niche topic for a narrow range of specialists. The desire deliberately to alter consciousness is a cultural universal manifest across a wide range of human experience; it cannot be exhausted within any one disciplinary perspective or set of interests. Across that wider set of concerns, psychedelics are neither medical nor religious phenomena exclusively; although these two are indispensable entrees, they are hardly comprehensive. Psychedelic experiences can also be understood as often having a distinctly *educational* character with patterns that are not reducible to situations of therapeutic recovery or religious mysticism. These patterns are in turn further distinguishable and greatly illuminated by describing them in traditional philosophical terms. The philosophical lens is not a *superior* way of looking at psychedelics, but it is well suited to doing so and it has been severely underappreciated. In the following pages, along with certain others, I argue that psychedelics are, in Grof's phrase, "non-specific amplifiers"—that is, they are essentially protean and elusive of any determinate *telos* or fixity of purpose, though their intimate directive power can fool one into thinking otherwise.<sup>65</sup> In contrast to what seems to be a prevailing hippie folk wisdom, psychedelics are not inherently environmentalist or Gaia-oriented, loving and politically progressive, oppositional or counter-cultural, spiritually healing or emotionally beneficent. They may certainly be those things on specific occasions for certain individuals (and I have personally experienced those manifestations). But they also may not be.

While psychedelic experience indeed has some identifiable deep structural features, my argumentative burden will be that these features do not point it in any particular direction; psychedelics do not by themselves give us *answers* to anything. Their philosophical and educational value lies elsewhere and this book's aim is to explain that contention. One of the virtues of a philosophical approach is that it can help us better to look beyond our subjective predilections and personal projections. Success along these lines is only ever partial, of course, as we are necessarily situated within interpretive horizons that are always embodied, enculturated, and bounded by geography and history and much else. The eastern and western philosophical traditions are very obviously themselves cases in point of this situatedness.

Still, it is just as much a part of us that we constantly struggle to see beyond those very horizons as well, the admittedly impossible attempt to do so being one way of looking at the philosophical enterprise as a whole.

Though our finitude guarantees perpetual failure, the equally perpetual struggle to “fail better” shows we are also always capable of *learning* and in so doing pushing outwards against our circumscriptions—not against all of them at once, but in places here and there.<sup>66</sup> Used wisely and with a constant eye toward safety, psychedelics can be potent allies in this endeavor, a philosophical and educational adjuvant that can augment both questioning and dissociation yet also re-affiliation and re-connection, fostering—among other things—a dynamic that neuroscientists term “neuroplasticity.” To be sure, this is a Goldilocks situation where, akin to a Vygotskian “zone of proximal development,” one wants neither too much nor too little neuroplasticity; one does not want one’s mentality either stuck in ruts or amorphously malleable.<sup>67</sup> And neither does one want plasticity for plasticity’s sake (traumatic brain injury and methamphetamines augment brain plasticity as well); obviously, what is needed is an adaptively *beneficial* plasticity rather than one that is debilitating.<sup>68</sup> This is where a philosophically informed educational framework can be useful. It can help provide a normative scaffolding from which to make a more distanced assessment of the worthwhileness and coherence of these experiences. As always, it would be ridiculous to aim at a definitive or final understanding of these phenomena, but a greater understanding is always an appropriately modest aim. Humility aside, though, these are extremely powerful “reality switch technologies,” in chemist and neuroscientist Andrew Gallimore’s words, that demonstrably act on our neuronal networks as “world-building machines,” what Watts calls the very “chemistry of consciousness.”<sup>69</sup> The stakes here for our sense of ourselves and how we perceive our ultimate purposes are high.

All learning involves a temporal dimension anticipating mortality—however obliquely—in that it separates oneself from one’s (previous) self to at least some small extent, constituting a new and altered self that now includes that which has been learned; out with the old you and in with the new one. This is why the passage of time provides the possibility of looking back on one’s former self with a degree of detachment, as if that younger self were, to a degree, a separate being, the distance between being filled with what has been experienced and learned in the interim. There is an intimate poignancy in such reflections, especially over a long span, as it is inevitably a kind of lived *memento mori*, a reminder of approaching death. In German philosopher Arthur Schopenhauer’s (1788–1860) words, “Every separation gives us a foretaste of death—and every reunion a foretaste of a resurrection.”<sup>70</sup> Perhaps there

is an intimation of both of these in the “ego death” reported in some of the most intensely dissociative states, such as that commonly described with 5-MeO-DMT, as an unsettling total “whiteout” of consciousness, the return from which is, strangely enough, often reported to result in deep and durable feelings of serenity and gratitude. Even if one has no desire for psychonautical adventure, chemically aided non-ordinary states of mind are interesting and beg for further inquiry. Maybe they’re mere illusions, maybe they’re truly profound, maybe they’re deeply worthwhile, and maybe some are better off never having had them. And maybe, somehow, they are all of these things. There are no guarantees in this realm. My purpose here is not to proselytize or recommend anything to anyone. Please consult your doctor, shaman, priest, or rabbi—or your lawyer—but certainly not your philosopher. Psychedelics are not for everybody. Nothing is for everybody. But there is nothing from which somebody cannot learn.