
Books Forum Introduction

Psychedelics: From clinic to art studio, from rainforest to church

Edited by Nicolas Langlitz

Department of Anthropology, New School for Social Research, New York, USA
E-mail: LanglitN@newschool.edu

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It was in faraway places that Euro-Americans first encountered the wondrous inner worlds to which hallucinogenic drugs offer access. From these colonial settings where the substances were used for religious and shamanic purposes, they were brought into experimental psychology laboratories and psychiatric clinics. Their biomedical exploration contributed significantly to making the 1950s the golden age of psychopharmacology. However, this research came to a near-total standstill as psychedelics were prohibited in the wake of clashes between the counterculture and the so-called establishment in the late 1960s. Today, however, such drugs have begun to play new roles in our biosocieties. The publications reviewed in this Books Forum examine different aspects of this story.

Psychedelic Psychiatry: LSD From Clinic to Campus by medical historian Erika Dyck focuses on the heyday of hallucinogen research in the 1950s and 1960s, triggered by Albert Hofmann's discovery of lysergic acid diethylamide in 1943 (Moser, 2012). In her review, sociologist Michelle Corbin compares and contrasts Dyck's disinterested historical inquiry into the work of Humphry Osmond's group at Weyburn Mental Hospital in Canada with literary scholar Richard Doyle's examination of how hallucinogen researchers and psychonauts have been struggling to communicate the mind-altering effects of psychedelic molecules via language. Going far beyond a rhetorical study of science, Doyle argues in *Darwin's Pharmacy: Sex, Plants and the Evolution of the Noösphere* that these allegedly eloquence-enhancing drugs were directing human evolution toward a post- or trans-human future.

Inspired by its author's own ayahuasca experience, Doyle's book can be regarded as a product of the globalization of spiritual uses of this Amazonian plant drug, which is the subject matter of the two books discussed by anthropologist Meg Stalcup from both a social scientific and an ethnobotanical perspective. *The Internationalization of Ayahuasca*, edited by Beatriz Labate and Henrik Jungaberle, examines how different regulatory regimes – from Germany and France to the United States and Brazil – have responded to drug users' appeals to religious liberty. *A Hallucinogenic Tea, Laced with Controversy: Ayahuasca in the Amazon and the United States* by the late Marlene Dobkin de Rios and Roger Rumrill compares traditional shamanistic uses of this concoction with its consumption by so-called drug tourists in South America and by members of the syncretic church União do Vegetal (UDV). A US Supreme Court decision from 2006 permitted UDV to administer this global biological as a religious sacrament.

Following up on our recent Books Forum on the 'contemporary physiology of art', historian of science and media Orit Halpern's review of three recent publications on psychedelic art argues for a 'psychedelic turn' in art criticism as part of a broader reconceptualization of human beings as universally capable of certain neurobiologically based sensory experiences, which can be extended and transformed by pharmacological and other means. The volume *Summer of Love: Psychedelic Art, Social Crisis and Counterculture in the 1960s*, edited by Christoph Grunenberg and Jonathan Harris, examines the social and political conditions, which endowed psychedelic art with a spirit of optimism, which has since largely disappeared. The essays in David Rubin's exhibition catalog, *Psychedelic: Optical and Visionary Art since the 1960s*, trace the visual history of the psychedelic sensibility up to the present. According to Ken Johnson's *Are You Experienced?: How Psychedelic Consciousness Transformed Modern Art*, contemporary art continues to conform with a 'psychedelic paradigm' imagined in analogy with the epochal formations, which Thomas Kuhn had described for the history of science.

The current renaissance of psychedelic research in biopsychiatry and neuropsychopharmacology (for

Nicolas Langlitz is Assistant Professor of Anthropology at the New School for Social Research in New York. He currently studies the epistemic culture of neurophilosophy and the prosocial turn in the behavioral sciences.

example, Langlitz, 2012; Sessa, 2012) will be discussed in a later Books Forum.

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Brain. Berkeley, CA: University of California Press.

Moser, J. (2012) *Psychotropen: Eine LSD-Biographie*. Konstanz, Germany: Konstanz University Press.

Sessa, B. (2012) *The Psychedelic Renaissance: Reassessing the Role of Psychedelic Drugs in 21st Century Psychiatry and Society*. London: Muswell Hill Press.

Books Forum

Psychedelic sciences writ small and large

Erika Dyck

Psychedelic Psychiatry: LSD from Clinic to Campus. John Hopkins University Press: Baltimore, 2008, US\$31.15, ISBN: 978-0801889943

Richard M. Doyle

Darwin's Pharmacy: Sex, Plants, and the Evolution of the Noösphere. University of Washington Press: Seattle, 2011, US\$70.00, ISBN: 978-0295990941

Reviewed by Michelle Corbin

Department of Sociology, Worcester State University, USA

E-mail: mcorbin@Worcester.edu.

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Since the 1990s, the psychedelic sciences have been experiencing a renaissance and there are once again multiple sites of scientific investigation of these consciousness-altering substances. As in the earlier period of research before the criminalization of psychedelics in the late 1960s, and the subsequent research hiatus, these contemporary psychedelic research projects continue to be dominated by the biomedical sciences and particularly by psychiatry, pharmacology and, more

recently, neurology. The new book by rhetorician of science Richard Doyle and the recent book by historian of medicine Erika Dyck provide much needed social, scientific and humanities perspectives on these reemerging but still controversial psychedelic sciences. In this review, I describe the contributions that each makes to the emerging body of contemporary psychedelics research, including how the ways that their work contributes to the disciplinary diversity of this field. I also situate their analysis of psychedelics research within the broader concerns of science and technology studies, which both of these books engage.

Erika Dyck is a historian of medicine at the Department of History and Classics and the Faculty of Medicine and Dentistry of the University of Alberta who has studied mental hospitals, eugenics and psychedelic psychiatry. Given the controversial and exceptionally politicized history of psychedelic substances and the scientific attempts to study them, Dyck's ability to straddle and connect the knowledges and practices of biomedicine with the historical and political contexts in which they are practised is particularly fruitful.

In *Psychedelic Psychiatry: LSD from Clinic to Campus*, Dyck focuses on the psychedelic studies conducted at Weyburn Mental Hospital in Saskatchewan, Canada during the 1950s by psychedelic pioneers Humphrey Osmond and Albert Hoffer, one of the largest and most influential research programs in the first period of the psychedelic sciences. Through archival research using the extensive experimental records of the Weyburn Hospital studies as well as through interviews with former volunteers, Dyck traces the history of research at Weyburn from the earliest studies at the beginning of this period when the psychedelic sciences were fairly unremarkable to the end of the program in the post-criminalization

Michelle Corbin serves as Assistant Professor of Sociology at Worcester State University, Worcester, MA. Her research examines the psychedelic sciences from the perspectives of feminist science studies and feminist sociology of knowledge.

period when the political climate, research restrictions and lack of funding made further research impossible. Dyck situates these psychedelic psychiatry studies and this moment of psychedelic science more generally in the cultural context of the post-World War II period and the culturally turbulent 1960s. She argues that a moral panic arose around LSD when it moved from the clinic to the campus during the so-called psychedelic revolution. There it became indelibly linked to this countercultural movement in the public mind and took on a lasting association with rebellion, danger, and the use of other illegal drugs, especially marijuana. In addition, she traces how the drug war politics of the period combined with these alarmist reactions to a countercultural movement seen as a threat to social order. This powerfully influenced the scientific study of psychedelics, ultimately resulting in the complete elimination of all psychedelic research for over 20 years.

Dyck also situates these early controversial psychedelic sciences against the scientific backdrop of the ascendancy of psychopharmacology and the growing acceptance of using pharmaceutical drugs to alter consciousness as a form of therapy. The increasing dominance of biomedical paradigms of objectivity and clinical trials as standards for scientific legitimacy were important to this story. As the history of psychedelic sciences has been dominated by psychiatry and to some extent psychology, Dyck examines more particularly the increasing dominance of psychopharmacology and biomedical science over the formerly psychodynamic discipline of psychiatry, a period she calls, drawing on the work of historian Edward Shorter, 'the second biological psychiatry' (p. 7). As such, Dyck argues that the very controversiality of these psychedelic studies, as seen in the case of Humphrey Osmond's research in Saskatchewan, illuminates political and epistemological concerns within the history of psychopharmacology and offers a unique opportunity to explore the politics of this increasingly dominant biomedical paradigm. She finds Humphrey Osmond's research to be a particularly instructive example in this history in that he had a pioneering role in the development of psychedelic psychiatry both as an insider to psychiatric and medical communities of practice and yet, also as a vocal critic of many of the central tenets of the biomedical paradigm based on his personal experiences with and clinical application of LSD. The epistemological and political conflicts he grappled with over the course of his pioneering psychedelics research exemplify the many conflicts and contestations raised by these complex chemicals and the

scientific and medical attempts to study and use them. Dyck analyzes the extensive experimental record of this one research program in order to explore these broader epistemological and political contestations as they played out in the practices and politics on the ground of a specific psychedelic laboratory.

As a psychiatrist, Osmond's primary interest was in exploring how psychedelics might offer insight into the underpinnings of mental illness. He and his research collaborators including Albert Hoffer argued in the spirit of the emerging biomedical paradigm that mental illness was a manifestation of biochemical dysfunction. Thus, mental illness might ultimately be observable under a microscope and treated using modern medical and especially biochemical technology. They saw in LSD an opportunity to study both the biochemical processes underlying mental illness and to observe the subjective experiences of psychedelics through systematic clinical administration. Having already conducted research, including self-experimentation with mescaline and then with LSD, Osmond sought a home for a new research program focusing on the scientific and clinical investigation of psychedelic substances as tools to investigate the biomedical processes at work in mental illnesses such as schizophrenia. He was invited to join Weyburn Hospital in Saskatchewan, Canada in 1951. At Weyburn, Osmond found an intellectual and political climate that allowed him to develop a flourishing psychedelics research program. Osmond came to Weyburn hoping to begin a two-part program of research using LSD that would allow them to identify the biochemical processes underlying schizophrenia and to collect experiences from subjects under the influence of mescaline or LSD.

In the early phases of their research, with limited funding they conducted self-experiments and solicited volunteers first from their families (including their wives), their graduate students and friends and eventually sought out healthy volunteers from the community. Through these initial trials where they tried to understand the effects of psychedelics and used those experiences to understand psychosis, they found that the drug seemed to have therapeutic benefits, even though they were not testing it as a therapeutic agent. Most volunteers deemed the experiences beneficial and commonly reported experiences of personal growth, transformation and sometimes even spiritual enlightenment or transcendence. This led to further research where they sought to identify and explore the psychotherapeutic possibilities of psychedelics including a research program that treated alcoholism through the administration of LSD and the facilitation

of intense and hopefully transformative psychedelic experiences.

Their ongoing research included administering psychedelics to schizophrenics, alcoholics and to normal volunteers. It reinforced their belief in the central causal importance of the psychedelic experience. They also concluded that an empathetic therapeutic relationship between the therapist and the subject receiving the psychedelic substance for therapeutic purposes was of central importance. Through their research they found that this powerful psychoactive therapy required a skilled and sensitive therapist to administer it safely and productively. It induced powerful experiences and Osmond and his collaborators found that the mind-set of test subjects and the setting in which the drugs were administered could make the difference between trauma and treatment. In this regard, they argued that psychedelic psychiatry served as a bridge between the biochemical model and psychodynamic and other psychological models. They argued that psychedelic psychiatry relies on biochemical models to understand mental illness and biochemical intervention as a therapy while simultaneously prioritizing subjective experience and the therapeutic relationship as central dimensions of effective clinical application of these biochemical interventions into biomedical illnesses. As Dyck asserts, 'psychedelic psychiatry promised a consciousness-raising, identity-changing therapy within a medically sanctioned and scientifically rigorous environment' (p. 31).

However, this foregrounding of subjective experience as central to the therapeutic process over and above the pharmacological management of brain biochemistry conflicted with the increasing dominance of the biomedical paradigm and the increasingly stringent efforts to 'purge scientific observations of individual subjectivity' (p. 48). Osmond's research, such as work in other psychedelic sciences, was challenged not only on political but on methodological grounds for its refusal to comply with the epistemic norm of objectivity, which Osmond regarded as detrimental to the potency of the substance and the psychedelic psychiatric process itself. In the end, Osmond's vision and the entire approach of psychedelic psychiatry ceased to be viable.

Dyck then describes how psychedelic substances were criminalized. The biomedical paradigm of the randomized controlled double-blind study also increasingly delegitimized those dimensions seen by most psychedelic researchers such as Osmond as central

to the psychedelic experience and its therapeutic potential. By the late 1960s, the increasing moral panic that infused media reports, and public perception, as well as laws, policies and FDA regulations restricting access to now illegal substances cumulatively worked to eliminate further research. Dyck argues that this uniquely controversial history illustrates important contestations over scientific knowledge, medical practice, political policy and cultural meanings. Dyck concludes by asserting that while there has recently been a resurgence of research on psychedelics, these contemporary studies are more enmeshed in the biomedical paradigms of pharmacology and now neuropharmacology. This research continues to raise important questions about subjectivity, drugs and policy.

In contrast to Dyck's detailed analysis of how a handful of scientists in one laboratory explored the possibilities offered by psychedelic substances and their peculiar effects on human psychology, Richard Doyle's recent book on the psychedelic sciences offers a sweeping and cosmic narrative wherein psychedelic plants are framed as central actors in the unfolding processes of planetary and human evolution. Where Dyck provides a detailed historical account, Doyle asks big questions about the ultimate meanings of psychedelics and their implications for the sciences of the mind and the universe. In this third book, in his trilogy examining the life sciences, Doyle explores the meanings of the psychedelic experience, the rhetorical practices surrounding their use and study and efforts to assess their significance for scientific knowledge. Like Dyck, Doyle's work also occupies an intersection between the humanities and the biomedical sciences. However, Doyle's disciplinary home is Department of English while he identifies as a rhetorician, and a rhetorician of science (p. 248).¹ This interdisciplinarity strengthens Doyle's work and allows him to combine a humanities commitment to language, a rhetorician's delight in multiplicities of meaning, and a science scholar's passion for scientific methodologies and technologies as he explores the grand scientific debates he sees at play as scientists grapple with these potent psychedelic substances and their possibly cosmic implications.

One of the central dimensions of their significance that Doyle examines in *Darwin's Pharmacy: Sex, Plants, and the Evolution of the Noösphere* is the argument that psychedelic plants have an important role in planetary and especially human evolution. He explains that through his own experiences with the

1 Pagination of Doyle's *Darwin's Pharmacy* follows the Kindle edition.

psychedelic plant ayahuasca and his engagement with scientific and lay psychedelic writing and research, he has embraced 'the idea that DNA and consciousness are somehow involved in a feedback loop in the distributed scheme of planetary plant intelligence suggested by the ayahuasca dialogues' (p. 275). He begins by drawing on the work of psychedelic pioneer Terrence McKenna who argued that human language and consciousness developed through humanity's early ingestion of psychedelic mushrooms (p. 110). He then argues that this development was in part initiated by what he affectionately calls the 'noösphere', a concept developed by the geochemist Vladimir Verdansky, to refer to 'the aware and conscious layer of the earth's ecosystem' (p. 11). Doyle argues that the noösphere is in unfolding evolutionary interconnection with the biosphere where, through a process he describes as 'involution', plants and animals and human beings enmeshed in and through their interconnected ecosystems form complex webs of relations, which push the growth of species and beings in multiple directions over time.

According to Doyle, this evolutionary unfolding includes not only the obvious and oft discussed ways that human beings alter living ecosystems and change the evolutionary paths of other beings, it also moves in the other direction. He troubles the usual humanist solipsistic narration of the complex planetary system and argues that plants also exhibit agency and have their own causal roles in the unfolding evolutionary dance among plants, animals and minerals. Within the dance between plants and humans in their interconnected evolutionary relationships, he argues that psychedelics emerged to facilitate the growth of language and the complexity of consciousness as part of this evolutionary process. Doyle theorizes that psychedelics themselves serve as agents of evolutionary development in part by altering the development of human consciousness and human evolution toward what he calls a transhuman future wherein the noösphere, the biosphere and the lithosphere can be rebalanced, and where entropic unfolding can continue.

Doyle's transdisciplinary book traces this theme of the evolutionary significance and agency of psychedelic plants across a wide range of scientific, popular and literary sites. First he returns to Darwin's articulation of natural selection and sexual selection and examines how psychedelic substances are implicated in both these processes, in large part through their effects on language or what he calls eloquence and the cultivation of information. He also examines the ways these linguistically facilitative substances seem

to induce creativity and pattern breaking. They have also had important experiential and rhetorical roles in scientific and technical breakthroughs within the biomedical sciences and genetic engineering, wherein the feedback loop of evolutionary change is mutually accelerated. Doyle ends his exploration through a detailed exploration of the psychedelic plant ayahuasca and the questions raised by the psychedelic experiences induced by what he calls the 'green teacher' (p. 255). He examines in particular the ways that ayahuasca facilitates what he calls 'ecodelic' or interconnected consciousness, its ability to challenge the individualistic and isolated ego and finally his hope that ayahuasca is a planetary teacher that can foster the evolution of transhuman consciousness and a much needed awareness of evolutionary processes (p. 35).

At the end of the book, the ultimate truth of such a grand narrative remains an open question both for the reader and for Doyle. However, this oscillation between grand visions and fractal uncertainty is one of the self-identified methods of Doyle's book, and also part of the beauty of his interdisciplinary and literary project wherein he weaves in between fiction and science, knowing and unknowing. His work places the novels of Philip K. Dick, the physics of Schrödinger, the weird science of John C. Lilly and a play about Cyrano de Bergerac into a dialogue that explores nuanced ideas from the biomedical sciences and psychedelic studies. The reader is invited to explore with the psychonauts the endless possibilities of an infinitely interconnected 'ecodelic' universe.

In conclusion, both of these books take up central problems psychedelics raise for scientific methodology and epistemology. Both Dyck and Doyle explore how various scientists thought about the ontology of these substances and how they have used the tools of science to assay these peculiar substances attempting to resolve the paradoxical questions inevitably raised by complex psychedelic experiences. Both have something to offer. Dyck provides a nuanced and detailed view of one of the most important historical sites of psychedelic scientific research. This fine grained attention to psychedelic pioneer Humphrey Osmond's influential studies and the social and cultural context in which this research blossomed and ultimately ended is both interesting in itself and also offers a window into the broader questions raised by attempts to study these substances scientifically. Doyle's book moves in the opposite direction and examines the grandest claims swirling around psychedelics in their broader scientific and ultimately human context. In

contrast to Dyck's detailed analysis of one site, Doyle ranges across multiple psychedelic sciences, implicating all of them in the long-term narratives of evolutionary biology and psychology and the cosmological

questions of physics. In both cases the reader takes away a greater understanding of the psychedelic sciences and a sense of the complexity of the questions raised by these peculiar substances.

Spiritual biologicals

Beatriz Caiuby Labate and
Henrik Jungaberle (eds.)

The Internationalization of Ayahuasca.

LIT Verlag, Zurich and Berlin, 2011, US\$69.95,
ISBN: 978-3643901484

Marlene Dobkin de Rios and Roger Rumrill
*A Hallucinogenic Tea, Laced with Controversy:
Ayahuasca in the Amazon and the United States.*
Praeger, Westport, CT, 2008, US\$49.95,
ISBN: 978-0313345425

Reviewed by Meg Stalcup^{a,b}

^aCenter for Biological Futures, Fred Hutchinson Cancer
Research Center, Seattle, USA

^bDepartment of Anthropology, University of
Washington, Washington, DC, USA
E-mail: mstalcup@uw.edu

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'Biologicals' are therapeutic substances made from living organisms, usually animals,¹ but here also including plants and fungi, and with therapeutic applications that are not only medical. One plant biological, called ayahuasca, has dispersed far beyond its origins in the Amazon principally because of the spiritual qualities with which it is credited. Over the course of the twentieth century, several organized religions developed around the core practice of taking ayahuasca as an 'entheogenic' sacrament – said to generate 'god within' (Ruck *et al*, 1979). This development prompted and provided the opportunity for scientific research on the safety and socio-psychological

impact of the drug. The expansion occasioned legal challenges and drug policy negotiations in Brazil where the religions began, and in the United States, Canada and multiple European nations where congregations have proliferated. Both independent shamans and church religious leaders voyage abroad as respected guides. In the Amazon, ayahuasca ceremonies offer, for a fee, psychotherapeutic and spiritual aid, drug treatment or ludic adventure to tourists.

Ayahuasca is, by all these counts, a very successful spiritual biological, one that can now be considered 'global' (Franklin, 2005). 'Global' does not mean everywhere, but rather describes how, unmoored from original rituals and settings, ayahuasca use is shaped by processes of religious institutionalization, scientific research, travel and legal regimes, which are local, national and transnational, and maintained by flows of global capital. This process of globalization, what constitutes legitimate use, and how that legitimacy is determined, are the foci of Labate and Jungaberle's edited volume *The Internationalization of Ayahuasca* and Dobkin de Rios and Rumrill's *A Hallucinogenic Tea, Laced with Controversy: Ayahuasca in the Amazon and the United States*. Many aspects of ayahuasca's expanding role in the world are examined and questioned in both books, and they ultimately give very different answers.

Ayahuasca is prepared from *Banisteriopsis caapi* (Spr. ex Griseb) Morton. This tropical liana, a Malpighiaceae, contains several harmala alkaloids with some psychopharmacological activity (see especially volume chapters by Ott; Riba and Banbanoj; and Frecska). *B. caapi* alone, or combined with additional species, may be referred to as 'ayahuasca', a Quechua word generally translated as 'spirit vine', 'vine of the soul' or 'vine of the dead'. However, in the aqueous preparation used sacramentally and in the majority of the academic literature, ayahuasca includes *Psychotria viridis*, Ruiz et Pavón, a shrub in the coffee family Rubiaceae. Rather than caffeine,

Meg Stalcup is a research fellow at the Center for Biological Futures, FHRC and affiliate faculty in the Department of Anthropology, University of Washington. Her research centers around security and the governance of life, in domains such as policing, international policy, drugs, global health and climate change.

1 An example is a vaccine grown in chick embryo cells. With recombinant technologies, the original animal connotation is already less apposite, and the word is here repurposed.

P. viridis contains the potent psychoactive agent N,N-dimethyltryptamine (DMT). Normally, DMT is orally inactive because it is quickly metabolized by the gastrointestinal enzyme monoamine oxidase A (although it can be insufflated, hence the use of shamanic snuffs). The harmala alkaloids in *B. caapi* inhibit this enzyme, so that when brewed with *P. viridis*, the result is a psychoactive ‘tea’ which for 4–6 hours produces feelings of ‘euphoria and well being, altered somatic perceptions and notably modifications in visual perception with open eyes, and elaborate dreamlike visions with closed eyes’ (chapter by Riba and Barbanoj, p. 149). The experience for many begins with nausea, vomiting and occasional diarrhoea. Some report anxiety, a sense of menace or fright. DMT was prohibited as a Schedule I substance in the 1971 United Nations Convention on Psychoactive Substances (see especially chapters by Frecska; Haber; and van den Plas, as well as Dobkin de Rios and Rumrill), a fact which has strongly shaped the struggles – fought anew in each nation – to obtain and safeguard the right to its use.

The Internationalization of Ayahuasca, drawn largely from papers presented at a 2008 conference, is divided into three sections on the ‘cultural, health and legal aspects’ of ayahuasca’s globalization. Notably, appeals to millennial knowledge have been instrumental in legitimizing ayahuasca practices. Indeed, almost any discussion of ayahuasca begins with reference to supposedly ancient indigenous use. Provocatively then, *The Internationalization of Ayahuasca* opens its first section with a chapter by ethnomusicologist Brabec de Mori, who argues plausibly that there is no proof that this exact combination of two botanical species has actually been used for more than 300 years. He marshals, among other evidence, ethnomusicological and linguistic analysis of the songs called *ikaros* (or *ícaros*) that accompany indigenous ceremonies, to argue that the musical diversity that would be expected of older origins is lacking exactly in the region where ayahuasca use is usually described as emerging. This puts him at odds with other authors even in the same volume. However, providing a plurality of perspectives is one goal of the volume. Later, Luna counters Brabec de Mori’s findings, writing that they do not necessarily hold for the rest of the Amazon (p. 125). Saéz further suggests that ayahuasca might be the main heir to a wide range of psychoactive substances, which indicates that the Amazonian shamanism that people usually seek to preserve is likely a changing body of knowledge (p. 134).

Several chapters are dedicated to different aspects of the ayahuasca religions. Santo Daime was founded

in the Brazilian state of Acre in the 1930s, and diversified into multiple branches, including another religion called Barquinha (chapter by Labate and Pacheco). União do Vegetal (UDV) was founded, independently, in the state of Rondônia in 1961 (chapter by Soares and Moura, among several others). These religions reflect a recurring narrative about the multi-ethnic origins of Brazil. Whereas nineteenth-century evolutionist theories held that ‘cultural and biological “miscegenation” between indigenous natives, European colonizers, and slaves brought from Africa’ would lead to a ‘degenerated race’, in the 1930s scholar Gilberto Freyre gave a positive valence to the notion of a racial melting pot (Labate and Pacheco, p. 73). This appeal to three-race Brazilian authenticity is also part of the ayahuasca religions’ narratives. As in Brazil more broadly, they can contain differential privileging, a subtly anti-African rejection by some of spirit incorporation, for example, or a claim to this heritage by others (p. 83).

A few chapters describe informal networks and groups of people who come together, often at someone’s house or in nature, to consume ayahuasca or its analogs for spiritual (Hanegraaf), ludic (Ott) or health (Schmid) purposes. Religions, and the legal tools available for the protection of worship, however, have been dominant shapers of the global form of ayahuasca. One way this has ramified is that the religions opened themselves up to long-term study. Considerable pharmacologic and clinical research has been undertaken to ascertain ayahuasca’s safety, part of a contemporary trend that is not of science and secularization, but science and religion. Studies by international research teams found that long-term users of ayahuasca have suffered no apparent harm (chapters by Bouso *et al*; Lima and Tófoli); strict diets weeks before ayahuasca experiences are not necessary (approximately 12 hours appear to be sufficient; see Frecska, p. 162); and precautions are indicated for those on SSRI antidepressants, but not conclusive proscription (Lima and Tófoli, p. 197).

Another ramification of the pursuit of legitimacy, however, is that the religions abandoned some of their own healing traditions. UDV occasionally used medicinal infusions of herbs with curative properties with ayahuasca (Chapter 2 by Labate and colleagues). The practice may or may not have originated with its charismatic leader, but was sufficiently important that the UDV officially declared its cessation in 2001, apprehensive of impeding ayahuasca’s institutionalization and legalization. Owing to concerns about ‘hallucinogen-induced persistent psychosis’, or backlash if latent psychosis were to manifest under the

influence of ayahuasca, the churches also now screen newcomers for mental illness (chapters by Polari de Alverga; Lima and Tófoli). However prudent, the result is to deny spiritual healing practices to those who in the past might have come precisely because of their symptoms (Polari de Alverga, pp. 214–216).

The third section focuses on legal and policy issues with globalization and, therewith, the organized ayahuasca churches. Any incredulity about the sincerity of faith or genuineness of the religions is likely to be dispelled by the factual, but also personal accounts in the chapters about challenges to the law and law enforcement, in different countries. These include Brazil (Boiteux; Soares and Moura), the United States (Bronfman; Haber), Canada (Tupper), the Netherlands (Plas), Germany (Rodhe and Sander), France (Bourgogne), Spain (Marín Prades; Lopéz-Pavillard and Casas) and Italy (Menozzi). Writing about the struggle to develop a Santo Daime community in Germany, for example, Rodhe and Sander give achingly sad descriptions of religious prosecution, as when ‘children of community members were threatened on their way to school, so finally the remaining Daimistas did not feel safe anymore and decided to leave the country’ (p. 347).

Sacramental ayahuasca has forced a confrontation between legal regimes for international drug control and laws protecting religious freedom. What the volume’s accounts drive home is the fragility of those protections despite the laws, and despite some successes (several Santo Daime groups are now thriving in Germany, and the conference which led to the edited volume was held there). Yet, even with considerable organization and resources for protracted litigation, some groups lost. Where the right to use ayahuasca was won in court, the police have often continued to consider ayahuasca (and the prohibited DMT it contains) within the purview of narcotics enforcement. In the United States, for example, the 2006 Supreme Court decision legally permitting religious ayahuasca use by the UDV was met with the creation of onerous policy regulations from the Department of Justice, which had lost the case. Given the relative autonomy of law enforcement to act, and its investment in drug control, what the volume provides in its chapters are not definitive outcomes, but snapshots of legal and policy struggles that will be on-going.

In contrast to *The Internationalization of Ayahuasca*’s dispassionate, sometimes technical language, *A Hallucinogenic Tea* is expressive, also shambolic, given to non-sequiturs and exclamation marks (‘Ayahuasca shamanism is a hot topic!’, p. 74). The text draws freely on interviews and research spanning

over 40 years, and offers interview transcripts, summaries and ethnographic vignettes. Rumrill and Dobkin de Rios both have long histories of studying and writing about the Amazon and its natives’ issues, as well as ayahuasca; indeed, Dobkin de Rios is part of ayahuasca’s history, having participated in certain formative events such as supporting UDV in its interactions with the US Department of Justice (pp. 124–125; also Bronfman, p. 289) and as a medical anthropologist working on a UDV adolescent study (pp. 118–121).

The book is divided into chapters on native use, drug tourism, new shamans, the UDV and Santo Daime ayahuasca churches, for which they provide welcome descriptions of the ceremonies not found in the edited volume, and a conclusion that touches on medical applications of ayahuasca, and the impacts of globalization and climate change. Throughout, ethnographic interludes are interspersed with commentary and blocks of ‘alternative points of view’, which can be confusing, but when not labeled are identifiable by the authors’ tone (for example, ‘The occasional bad trip experienced by New Age drug tourists leads many to try to make sense of the experience and to learn from it...Long live the bad trip, so we can rise up from the ashes of our own destructive behavior, now removed, and be able to set forth on a new life journey’, pp. 82–83).

The authors are focused on what they call ‘trendy hallucinogenic ingestion’ because it can cause ‘harm to participants’ and also because they fear that this drug tourism ‘changes and effectively destroys traditional urban and rural hallucinogenic healing that has roots in the prehistoric past’ (p. 71). They are not against ayahuasca use; on the contrary, they believe that psychoactive biologicals serve a useful social purpose by inducing hypersuggestibility (‘Call it mind control, if you like, or brainwashing – but suggestibility is the more accurate psychological term’, p. 16). Suggestibility facilitates the functional ‘self-deception’ of religion, allowing believers the illusion that they can control their environment, the evolutionary advantage of which is that reality would otherwise be too depressing (p. 19). The problem is that this same suggestibility makes tourists taking ayahuasca in the Amazon easy prey for ‘pseudo-healers’. Ayahuasca is appropriate, in their view, within rituals, such as those of rural and urban Amazonians, the ayahuasca religions, or the drug treatment center in Peru founded by Dr. Mabit, a French physician who incorporates Catholic elements in his ceremonies (p. 102; also Chapter 13 by Labate and colleagues).

A strength of the book is that the interviews, profiles and vignettes provide information on both purveyors and seekers of ayahuasca that the reader can assess. Rather to the detriment of what is intended as an 'exposé' (p. 2), the new shamans' claims to being able to cure diseases come across as no more or less extreme than those of the shamans held up as exemplary. Although scorn is heaped on the 'empty self' of the 'New Age' ayahuasca tourist, which 'needs to be filled up with calories, drugs, sex, and power' (p. 137), the personal stories of those who traveled to the Amazon to take ayahuasca are touching. As reported to the authors by healers described as 'reputable', or which they draw from other scholars' work, these range from romantic – a French professor was attracted by 'the mysticism of the rainforest', to heart-breaking – 'anguish and depression that I have been suffering since I was 15 years old', rape and cancer (p. 81). Rather than making the tourists seem frivolous or naïve, Dobkin de Rios and Rumrill's descriptions such as 'the ayahuasca user is a sitting duck!' (p. 137) read as an exercise in shaming directed at readers who might be tempted to become tourists themselves.

'New Age' mysticism is arguably (and more charitably) characterized by a flowering of unchurched forms of spirituality, considered part of the 'Fourth Great Awakening' of American religious life. Moreover, sociological research does not suggest that tourism, spiritual or otherwise, indicates an 'empty self'. Rather, 'drug-related tourist experiences are heterogeneous in nature and might involve either a pursuit of mere pleasure or a quest for profound and meaningful experiences' by people who are 'not necessarily estranged from their own culture' or bored with 'routine life' (Uriely and Belhassen, 2005). The fact of the matter is, however, that the ingestion of a psychoactive preparation powerfully altering the experience of one's surroundings, in an unfamiliar jungle, without a trusted person at hand, has the potential to be dangerous, which begs the question of why Dobkin de Rios and Rumrill don't make a better case against it.

The only aid the authors offer for distinguishing between folk healers and fakes is that 'charlatans do not believe in what they say or do' (p. 88). No substantive differences are demonstrated, although some are claimed. There is mention of sexual improprieties by the 'new shamans who typically seduce and then cast aside female followers or who exhibit crass financial motives' (p. 13), but this is simply asserted. Rumrill is an experienced journalist. Allegations that 'women are seduced, raped, and discarded after their

novelty to the healer wears off' (p. 82) warrant investigation. Likewise, if a woman 'died from an aneurysm while under the effects of ayahuasca' then there must be more proof than the declaration that this was '[a]nother case whispered about among Iquitos residents' (p. 8).

Instead, a quite serious issue emerges about *A Hallucinogenic Tea*. In their zeal to reveal the dangers of ayahuasca tourism and the damage it causes not just to hoodwinked tourists, but also to local social systems, economies and heritages, Dobkin de Rios and Rumrill make factual misrepresentations. As well-established experts, they must know both the facts, and the damage done by scare tactics that dispense inaccurate information. For example, they write, 'interesting scientific literature exists that links plants like ayahuasca both to the impairment of memory (both storage and retrieval) and to submissive and obedient behavior in victims who are given psychedelics as a type of "Mickey Finn"'. In such states, the intoxicated individual follows any command, presents no resistance and offers money and possessions to the offender' (p. 16). However, there are no reports of *B. caapi* or ayahuasca being slipped to unsuspecting tourists. Dobkin de Rios and Rumrill cannot provide a reference. Ayahuasca, with its strong taste, would be very hard to surreptitiously slip to anyone. Rather, this story resembles those told of tourists in Colombia being given 'burundanga' – scopolamine-containing *datura* or *brugmansia* species in the nightshade family, which are sometimes added to *B. caapi*, but are not botanically or pharmacologically related.

'Unscrupulous practitioners', they write, 'give tourists mixtures of 12 or more different psychedelic plants to help them mystically become embedded in the universe. Many are witchcraft plants that affect neurotransmitters, upset the balance of certain brain chemicals, and may even make it impossible to read or write for an entire year' (p. 70). Witchcraft plants can be reasonably assumed to refer, again, to those in the nightshade family, and many do have powerful psychopharmacological effects. They can also cause a short-term paralysis or sluggishness of optic control muscles and nerves. However, those effects last a day or two. There are no psychoactive plants with documented pharmacological effects that last a year. Perhaps they mean to describe a hypertensive reaction and resulting stroke, which could produce long-lasting damage – but that is not what they write, and the intent seems simply to make the tourism experience appear dangerous.

Both books, in their way, advocate for ayahuasca, but they are fundamentally divided on what uses are

legitimate, and how they should be managed. For Dobkin de Rios and Rumrill, ayahuasca must be used ritually. They cite approvingly the Brazilian government's approach of allowing it to religious groups that are 'properly registered with and recognized by the state' (p. 145). Beyond that, ayahuasca should be incorporated into a 'medical/spiritual model', where 'a cost-benefit analysis carefully evaluates the ingestion of the plant with health and mental health risks' (p. 147).

The very diversity of voices and perspectives in *The Internationalization of Ayahuasca* present its opposition to this vision of government control, institutionalization and medicalization. Although the goal of the Santo Daime and UDV leaders has been to integrate ayahuasca religions thoroughly into the mainstream, the danger in their success is that governments are in the position of deciding what counts as a genuine religion. In the final chapter, Sandberg argues that courts must *not* judge the validity of religions themselves, but rather assess if government interference with freedom (to take ayahuasca) is warranted on grounds such as public order, or public health. Further, although the ayahuasca churches have been

fundamental to the globalization of their sacrament, submitting to institutionalization in order to be able to practice one's belief constitutes a 'limitation on the right to the expression of religious freedom' (Boiteux, p. 273).

The differences in these books, in the end, point to how a biological, taken up as spiritual equipment, challenges standard categories of drugs and religion, a result that perhaps says less about ayahuasca than the contemporary anthropological world.

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Reviewed by Orit Halpern

Department of Historical Studies, The New School for Social Research, New York, USA

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To Every Age Its Art, to Art its Freedom
Vienna Secession (1897)

It is one of the foundational tenets of contemporary studies of media and visual culture that the art of every age reflects its values, ideals, socio-technical practices and politics. One might say, taking the mantras of modernist art movements seriously, that art is not merely representative but in fact constitutive, of contemporary forms of attention, distraction and experience. Political theorist, Jacques Rancière, has gone so far as to argue that politics and aesthetics must be thought together, in that both involve the

Psychedelic vision

Christoph Grunenberg and Jonathan Harris
Summer of Love: Psychedelic Art, Social Crisis and Counterculture in the 1960s. Liverpool University Press and Tate Liverpool, Liverpool, 2006.
US\$34.41, ISBN: 978-0853239291

Ken Johnson
Are You Experienced?: How Psychedelic Consciousness Transformed Modern Art. Prestel Publishing, New York, 2011. US\$33.81,
ISBN: 978-3791344980

David Rubin
Psychedelic: Optical and Visionary Art since the 1960s. MIT Press and San Antonio Museum of Art, Cambridge, MA, 2010. US\$24.90,
ISBN: 978-0262014045

Orit Halpern is an assistant professor in history at the New School for Social Research and Eugene Lang College who works on design, art, cybernetics and the human sciences. Her forthcoming book *Beautiful Data: A History of Vision and Reason since 1945* (Duke University Press) is a genealogy of contemporary forms of interactivity and data visualisation.

organization of sense. If we choose to believe these ideas, then which aesthetic discourse we privilege in the writing of history can only be understood as a political contest over the forms of sense, and even experience, we culturally value in the present. What is labelled 'art' and how it is labelled will reveal something about our contemporary forms of governmentality (Rancière, 2006).

Therefore, it should be of interest to those studying the history of science and science studies, to note the sudden resurgent popularity of 'psychedelic' as a term defining the aesthetics of art and culture since the 1960s replacing, or at least displacing, other discourses including computation, cybernetics, communication and the digital. What has happened to make this once seemingly marginal and threatening state the darling of curators, academics and journalists? More importantly, what is at stake in redefining our contemporary states of attention and distraction in these terms? This review argues that this psychedelic 'turn' in art criticism refracts a broader reconfiguration of the observer as simultaneously networked through a homogenous species biology that creates uniform nervous experiences while simultaneously operating in a personalized space of choice and drug consumption.

Three recently published books shed light on how this psychedelic discourse is being deployed and its place in contemporary culture: Christopher Grunenberg and Jonathan Harris's essay collection *Summer of Love: Psychedelic Art, Social Crisis and Counter-culture in the 1960's*, Ken Johnson's *Are You Experienced: How Psychedelic Consciousness Transformed Modern Art* and David Rubin's edited volume *Psychedelic: Optical and Visionary Art Since the 1960s*. Although different in tenor and objective, all three books reveal a historical transformation in attitudes to psychedelia and a contemporary desire to rescript forms of viewing and experiencing culture in the last half century in terms of drug use, personal experience, phenomenology and often biology.

If 'psychedelic' is the language of an attempt to grasp something more ephemeral – perhaps what Benjamin (1979 [1931]) labelled the 'optical unconscious' of the present – this effort speaks through a discourse of historical rupture and epistemic transformation. The psychedelic is labelled a 'sensibility', a type of 'responsiveness' (Rubin, 2010, pp. 16–18), an 'awakening' and a 'paradigm' (Johnson, 2011, pp. 217–218). This language designates not so much of an actual practice of drug use as an effort to delineate a historically specific form of sense making that cannot be separated from an amorphous drug culture of the late 1960s and early 1970s.

What then marks this 'sensibility'? Neon colours? Wavering forms? The effort of art to induce perceptual confusion? None of these features – colour, form or perceptual manipulation – can be said to have held true throughout the history of artistic practice. Surrealism, constructivism, Bauhaus, to name classic reference points, all had their colour theories, psychological theories and commitments to transforming subjectivity. However, two features do appear to define the psychedelic in art and culture for all three texts: first, an absence of depth psychology and of any discourses of consciousness and unconsciousness. Second, there appears to be a subtle valorization of non-digital arts and practices, particularly in the exhibition catalogues. It is drug use, not computer code, programming or the non-conscious manipulations of the media that figure as the central practice defining our contemporary forms of attention, distraction and interaction for these authors.

This is not to say that psychedelic practices are antagonistic to digital media, but only to demarcate an insistence from within the texts asserting the greater import of intuitive and unpredictable aspects of contemporary perception and cognition rather than the computational and algorithmic elements. In all three books, languages of psychiatry and sensation replace those of control and programmability in the discourse on art and politics. These accounts are invested in biology and the human body as shaping media and as sites of experience.

The first book, *Summer of Love*, is the widest ranging and most academic of the three books. It uses the language of the psychedelic as an x-ray with which to reveal the changing nature of politics and aesthetics since 1968. Comprising a series of genuinely interesting and rigorous essays, the book makes a serious effort to account for the conditions producing this genre of art and to expand the kinds of mediums involved including performance and music. Little defines the psychedelic throughout the collection with the exception of an agreement by authors as to its non-movement orientation, and its identification with 'idealism and hope' – an idealism and hope that the authors largely assume are lacking in the present. We are living in the 'Winter of Discontent', the editors argue, and imply that reviewing the events of the *Summer of Love* may awaken us from this malaise (Grunenberg and Harris, 2005, p. 16).

Therefore, one of the recurring themes in this collection is the perseverance, and perhaps political necessity, of returning psychedelic concepts to the present. In an opening essay, art historian Stuart Laing asserts that in the 1960s there existed a

disjuncture between 'straight' and 'psychedelic' culture. Psychedelic culture served 'the idea that a culture and society could be reformed and transformed by psychic liberation and creative play'. He presents this consciousness as a type of resistance to hegemonic culture, operating by turning the very central tenets of post-industrial capital – consumption, individuation and distraction – into a communal ethos and optic for criticism. The opportunity of such activism dissipated with the end of liberal governments in both Britain and the United States, and the rise of conservative parties in the wake of global conflicts, oil embargoes and labour strife. Laing intimates that, if we could only remember the playful capacity to transform our perceptual fields and psychic spaces, perhaps we could produce new forms of time and experience in the present. The corollary of this argument is that the late 1960s were moments of opportunity when the nascent forces of neoliberalism and globalization had not yet consolidated into the familiar forms of the present.

The emerging questions are: What identifies psychedelic practice within the late 1960s? and What is at stake in historically returning to the 1960s as a site of emancipation and political opportunity? As Barbara Kienscherf's essay demonstrates, utopia and psychedelic practices have long been entangled in the search for colour music. Since the eighteenth century, there has been a desire for merging music and vision. This desire must be understood as political in seeking to revise the vision-dominated hierarchy of the senses in order to produce a more equal perceptual, and by derivation, social field, reminding us that this impulse still animates our nightclubs, and music videos might, she hopes, reawaken the radical potentials of equating vision and aurality (Grunenberg and Harris, 2005, pp. 179–201).

This flattening of the subject and de-hierarchizing of perception are what mark the psychedelic and put it at odds with other forms of social protest in *Summer of Love*. As Andrew Wilson in his analysis of the London psychedelic scene in the 1960s argues convincingly, 'the events of 1968 exposed the split between those voyagers of inner space who believed that imagination was enough and activists who understood that social and political struggle entailed a return to more orthodox, even Marxian, forms of analysis, conflict, and action' (Grunenberg and Harris, 2005, p. 17). This disjuncture or tension between structure, analysis and personalized experience characterizes, Wilson argues, the political crisis of the late 1960s and continues to resonate today. By contrast, in Nanette Aldred's analysis, performances in music and art of the psychedelic movement focus

on schizophrenic splits that sunder subjectivities, offering symptoms of a situation in which personal liberation came at the cost of connection unless the 'body can find a way to operate in social space' (Grunenberg and Harris, 2005, p. 118). Drugs and methods of performance were techniques to engage in this dialectic between the personal and the social.

The art historian, Brandon Joseph, in his essay on Warhol's *Exploding Plastic Inevitable* suggests a faint messianic promise in psychedelic artwork. He argues that the tactics and attitudes of the 1960s in the turn to individualized approaches and self-management pioneered new tactics for politics. For Joseph, the semantic turn in the discourse of the *avant-garde* to that of counter-culture and underground reflects a turn, such as William S. Burroughs's mole hills, inward into the logic of their contemporary technological and social systems. In this model of political life, drug-induced (or drug-like) reflexivity rather than dialectical confrontation serves as the only tactic to reveal the operations of hegemonic powers. For Joseph, there is a faint possibility in this encounter between the logistics of government, corporate aesthetics and the play of art for an 'adventure' for those who were ready to go 'travelling'. Joseph writes that Warhol's work was an experiment in pushing the nature of contemporary attention to its extreme that might produce adventurous results serving as a beacon to the only critical strategy left to the present (Grunenberg and Harris, 2005, p. 258).

Summer of Love therefore insists that changes in technology and society have made it so that contests over power no longer occur at the level of representation and language, but rather at the level of this nervous network (literally and figuratively). However, these authors tend to insist on the importance of separating the psychedelic drug culture from other practices and institutions of the time – the Central Intelligence Agency (CIA), political movements, to name a few. The culture of the psychedelic may have been a product of its time, but recuperating this state (assumed to be lost) will inform our contemporary politics for the better by way of a reflexive and self-referential loop into our own minds. Exploring psychedelic art and culture, the editors of *Summer of Love* insist and make visible a historical turn to a society ruled by sense and not by reason.

The future of politics, as imagined in *Summer of Love*, must by deduction occur at the level of reconciling nervous systems, attention fields, individual experience and psychiatric manipulations with structural concerns and inequalities such as race, class and gender. However, the answer, unfortunately merely

implied in many of these texts, is to abandon the structural in favour of self-referential drug-induced artistic practices.

The turn from the computational and systemic to the personal and biological is perhaps nowhere more evident than in Ken Johnson's *Are You Experienced?* This is a journalistic account of the author's observation that psychedelic experiences and drug culture have transformed modern art since 1965. Traversing virtually all of contemporary art, Johnson has little trouble collapsing art ranging from minimalism and conceptual art to pop art and beyond (Michael Snow, Cindy Sherman, Barbara Kruger, Robert Smithson and Takashi Murakami all figure prominently in the book). The psychedelic appears here to apply to any effort to transform perception. The narrative of the text relies on personal accounts of artists using drugs, particularly LSD, to make this case – although actual drug use is not the sole criterion for inclusion. While briefly touching on digital media, Johnson privileges painting, sculpture and cinematic works of art. Historically, this appears reductive. But it works well as a form to provide the necessary stills and storylines to counterpose with the text. The text is also highly engagingly written.

Johnson's narratives of drug use are creatively juxtaposed with images and artworks that never actually correlate with the biographies being recounted. This forces the reader to make her own (perhaps psychedelic) connections between the visible and the textual. This tactic of course appears to confirm that the art piece in question was produced while on drugs, when, in fact, often one is reading text relating to a different artist's biography.

However, this leaves the reader asking some questions: What terms of difference exist in the realm of the drugged experience, particularly as Johnson brings in feminists and critical race theorists/artists? Where does medium specificity sit in this account? How homogeneous is history or, for that matter, 'drug culture'? Johnson is silent on these issues, for what he privileges is 'experience' – individual experience as the measure of art. This privileged subjectivity, however, is quite clearly not one of psychoanalytic subjects. Psychedelic, for him, is 'intuitively ... and perceptually engaging'. It is affective, but very often 'not emotional', or unrelated to creating sentiments that enter language, representation or consciousness (Johnson, 2011, p. 31).

Accompanying this flat but affective and egoless subject is the seeming disappearance of the social, replaced by a concept of 'drug culture'. As though to assert the centrality of the individual, not social, nature of perception, Johnson focuses on the critic's

perception of the piece as psychedelic, rather than the political economy of distribution and production or the broader field of reception. For example, in discussing African American conceptual artist Adrian Piper's use of LSD, Johnson is careful to cite the artists' mention of dropping acid. He then commences to assume that dropping acid must therefore be counter-hegemonic and racist, because it transforms perspective and challenges state authority (Johnson, 2011, p. 22). That Piper's work is hardly psychedelic in its aesthetics or critical reception has little weight in this account, or do the differences between different forms of political and social activism within the period.

Contemporary perception in this account is affective, behavioural, non-conscious, self-referential and deeply embodied. The act of dropping acid is taken as a signifier and determinant of the experience. Johnson focuses on spectatorship, collapsing the artist biography and the critic's observation. This spectatorship makes consumption (in this case of drugs) the site of value in art.

On the one hand, this history of art from the perspective of drug culture is original. On the other hand, the scope and exploration of what comprises drug culture in its multiplicity is limited. The work of art appears here as merely a direct conduit to an aesthetically standardized drugged cultural unconscious rather than an encounter with forms of thought or aesthetics that are open to translation and, ultimately, to encountering the impossibility of accessing another human being's life. The possibility of an encounter with art truly creates an experience not through the homogeneity of egoless dissolution but through recognizing the inaccessibility and illegibility of an image produced not by one's self is impossible in this text.

The book *Psychedelic: Optical and Visionary Art since the 1960s* offers a further extension of this focus on the individual and affective as the measure of contemporary aesthetics. It is an exhibition catalogue of a show held at the San Antonio Museum of Art in 2010, which offered a wide variety of art works stretching across 50 years. The show clearly takes inspiration from the 1965 MOMA exhibition *The Responsive Eye* that centred on op art and makes a strong argument that the psychedelic is a privileged form of perception for the digital age. Interestingly enough, digital media only appear in passing. It is painting that serves as the bearer of this condition (Rubin, 2010, p. 24).

This return (perhaps of the repressed) to painting echoes Clement Greenberg's original discussions of

abstract expressionism in his essays from 1959 and 1960, 'The Case for Abstract Art' and 'Modernist Painting'. The introductory essay to *Psychedelic* argues, 'Over those three decades ... visual splendor was produced as an end in itself, as a content intensifier, and as a conceptual or symbolic signifier for aspects of technology, sexuality, and spirituality. More and more, a psychedelic sensibility emerged as a multipurpose vernacular, a move perhaps toward a universal language that may be understood regardless of ethnic or geographic background and seems appropriately suited to our current digital age' (Rubin, 2010, p. 28). Remarkable in this statement is the transformation of optical purity, seemingly central to abstract expressionism, and the transcultural discourse of universal language regularly assigned to computation, mathematics and communication theories, to a practice aligned with highly individual actions, subjectivity, affect and popular sentiments. This is no longer art for its own sake, but rather art in service to the consumption of older forms of identity and subjectivity ('ethnic' and 'geographic' background) into a 'universal language' of intensified sensations. Art, the exhibit indicates, now functions to circulate sense as identity, perhaps overcoming questions of translation and language.

Therefore, central to the exhibits' thrust is the popularization, perhaps individuation, of art. One of the essays goes so far as to argue that this revision of humankind and experience is the search 'for a revitalization of what may suddenly appear on the surface of reality and revive a sense of feeling alive, productive and happy against all odds'. This turn to 'happiness' as a defining element of the aesthetic experience of the psychedelic appears to traverse both Johnson's work and this art catalogue. It appears that if other forms of perception – digital, computational, abstract – prompt alienation or self-awareness and cut us off from one another, this new privileged form of perceptual manipulation will be about pleasure. Happiness bridges those differences of territory and subjectivity. There are no Brechtian alienation effects in these texts, and bad acid trips do not figure prominently in the exhibits (in contrast to H.R. Giger's work, for example) (Rubin, 2010, p. 47).

The choice of works strongly affirms this curatorial desire to demonstrate the 'universal' and 'happy' nature of psychedelic art. Beautifully reproduced, Little binds the chosen works together apart from the strong concentration on painting and the Southwestern influence, and an emphasis on fluorescent colour. While there is no explanatory text about the works to assist the uninformed reader or clarify curatorial

decisions, the organization of the catalogue vacillates between figurative pieces understood as depicting the mental travel space of a trip through comic form and illustration, and geometric works whose prime organization appears to be manipulating concepts from Gestalt psychology and calling on op-art tactics. This vacillation between the figurative and abstract demonstrates that in psychedelic vision the modernist separations between abstraction and materiality or organicism and functionalism do not hold, seemingly smoothed over now in an optic of 'happiness', a universal language of positive affect.

What both *Are You Experienced?* and *Psychedelic* expose is a paradox that characterizes our contemporary discourses of attention between a normative and homogenizing move to valorize physiological understandings of human psychology while simultaneously affirming the potency and uniqueness of personalization and individual experience as forms of artistic practice and critical engagement.

These are, of course, not truly opposed but rather co-constituted logics that mediate between the belief in a biological human species whose capacity for psychedelic experiences is uniform and universal and a more contemporary concept of nervous systems and bodies as infinitely extendable, enhanceable and transformable. The observer here can be said to be simultaneously networked and highly isolated through this seeming logic of 'experience'. It is, in fact, this tension between nervous populations and personalized nervous systems that appears to drive the ongoing interest in 'psychedelic' experience, drugs and art in our present.

Thus, these three books all affirm the faith that contemporary forms of life and politics are fundamentally linked to the technical manipulation of the sensorium best expressed through the practices of drug culture. Whether this awakens us to our condition in the present or alerts us to new tactics is unclear. We may ask whether the relegation of the psychedelic to a historically identifiable aesthetic and a curated art object makes the phenomena no longer the site of experimentation, but rather exposes a historical turn where politics and sense have become affective, self-referential and psychiatric.

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