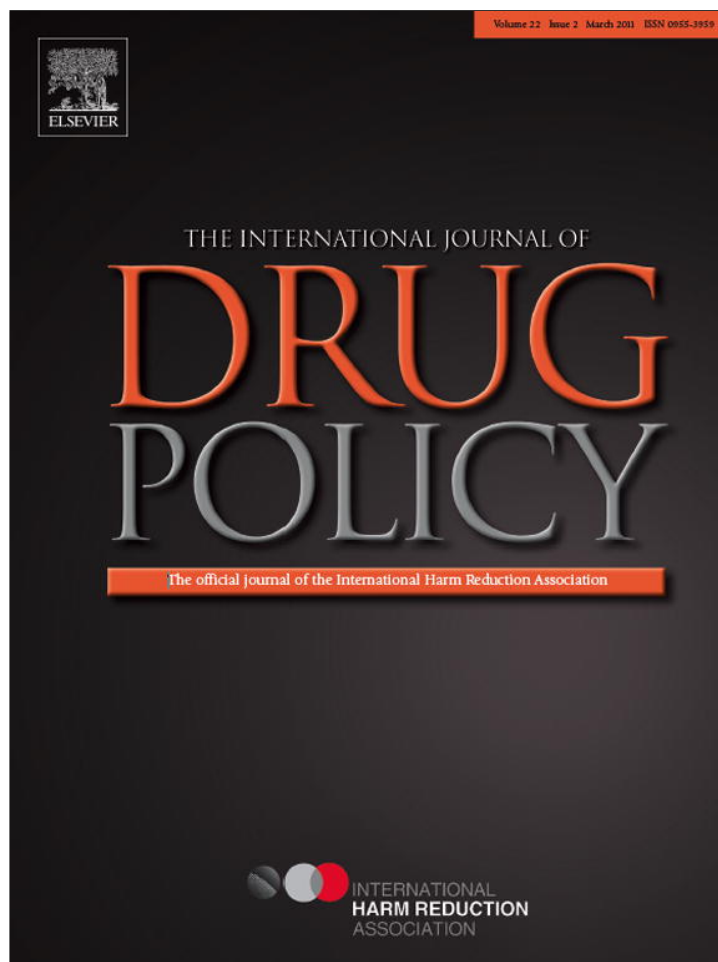


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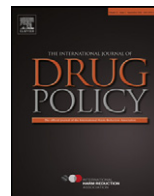
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Conference report

The expansion of the field of research on ayahuasca: Some reflections about the ayahuasca track at the 2010 MAPS “Psychedelic Science in the 21st Century” conference

Beatriz Caiuby Labate*, Clancy Cavnar

Institute of Medical Psychology, Centre for Psychosocial Medicine, Heidelberg University, Bergheimer Straße 20, 69115 Heidelberg, Germany

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A recent conference sponsored by the Multidisciplinary Association for Psychedelic Studies (MAPS) in collaboration with the Heffter Research Institute, the Beckley Foundation and the Council on Spiritual Practices held from April 15th to 18th 2010, in San José, USA (MAPS, 2010) united 90 presenters and 1100 participants with the goal of giving visibility to studies on the therapeutic potentials of psychedelics (psilocybin, MDMA, ibogaine, ayahuasca, etc.) in the treatment of often intractable ailments such as anxiety in terminal cancer patients, cluster headaches, obsessive–compulsive disorders, drug addiction, and post-traumatic stress disorders, as well as the role of these substances in human enhancement and well-being in general. MAPS was chartered in 1986, with the mission to develop cannabis and psychedelics into prescription medicines to treat illnesses, to build a network of clinics where these prescription medicines can be administered, and to provide public education on the harm and benefits of using psychedelics and cannabis. The institution has managed to get the permission of the DEA and FDA to conduct a number of clinical trials with psychedelics over the years. Straddling the fence between establishment and counterculture, MAPS has generally been criticized by mainstream medicine for promoting the use of “dangerous drugs,” while other members of the psychedelic community have complained that MAPS is either too medically focused or too incendiary in its tactics with the US government. Ultimately, MAPS continues to enjoy the popular support of many and occupy a leading position on the field, such as the development, with the support of other important institutions, of the *Psychedelic Science in the 21st Century* conference

The gathering was held in Silicon Valley, where psychedelics have often, though quietly, been credited with helping to inspire

the digital revolution of the past few decades (Markoff, 2005). This conference, one of the largest of its kind, was in many ways a continuation of the academic investigations of psychedelics of the 1950s–1970s, including the work of Timothy Leary, Aldous Huxley and many others (Winkelman & Roberts, 2007).

We look here at the increasing interest in the use of ayahuasca as presented from various points of reference through this conference. Ayahuasca is a drink originating in South America containing DMT that is used in rituals by indigenous and mestizo shamans, as sacrament in two international churches, the Santo Daime and the União do Vegetal, and by Western psychotherapeutic, new age and psychonautic circles. Studies about ayahuasca dialogue with classic and contemporary questions in ethnobotany, pharmacology, anthropology, religious studies, law, music, psychiatry, psychology and several other disciplines. These studies have tried to keep pace with the ways the consumption of the substance has diversified, and have themselves grown in number and type of approach. This area of research also has great importance for discussions of the consumption of so-called “drugs of abuse,” harm-reduction and prohibitionism (Labate, Rose, & Santos, 2009).

The current article examines the nature of the contributions to the Ayahuasca Track and note the mix of persons, from research scientists to shamans, including many seekers of healing and spiritual experience, interested in the topic. We draw an overview of the track debates, and ideas that perhaps deserve more space are considered, and notable presentations are discussed. Finally, we reflect on the ethical, political and methodological challenges involved in research with ayahuasca. We hope that this text will provide a useful review of the current state of research in the field of ayahuasca studies.

Originally envisioning just two tracks, the “Continuing Medical Education (CME) Track” and the “Non-CME” or “Research and Cultural Track,” the MAPS conference staff saw a new and unexpected third track appear, the “Ayahuasca Track,” which was created as

* Corresponding author. Tel.: +49 06221 56 81 85; fax: +49 06221 56 53 03.

E-mail addresses: blabate@bialabate.net, beatriz.labate@med.uni-heidelberg.de (B.C. Labate).

a result of the high number of proposals submitted by presenters from different disciplines on the topic of ayahuasca. It was as if the vine had spontaneously invaded the space of the conference as it pleased. No doubt this is evidence of the increasing interest in the use of this plant throughout the world (Labate et al., 2009; Labate, 2004, 2005; Tupper, 2008) despite the fact that among psychedelics, ayahuasca is less studied from a biomedical or clinical perspective than others substances discussed in the CME-track.

Brazilian anthropologist and ayahuasca researcher Beatriz Caiuby Labate (Labate & MacRae, 2006, 2010; Labate & Pacheco, 2010; Labate et al., 2009) moderated the Ayahuasca Track, which was composed of 22 presentations about ayahuasca. Apart from that, there was also a poster presentation on ayahuasca use in the United States; the Spanish pharmacologist Jordi Riba (Riba et al., 2006, 2003, 2001) gave a summary of his work concerning the first controlled studies of the human neuropsychopharmacology of ayahuasca in the CME track; and the Canadian filmmaker Richard Meech showed his 2009 one-hour documentary "The Vine of the Soul: Encounters with Ayahuasca" late one night.

Another indication of the increase in public interest on the topic of ayahuasca could be found outside the official conference program itself, in the presence of several other filmmakers who attended the conference. Mark Ellam is a documentary filmmaker from Canada who has been working for eight years on a film produced for the Canadian Broadcasting Corporation's "Nature of Things" about ayahuasca, its use in psychotherapy and community, and its neurochemistry. Another filmmaker present was Maxi Cohen, an artist from New York City who is shooting "The Holy Give Me," a film about the use of ayahuasca in Brazil, from its roots with Amazonian indigenous peoples through its transformation into religious use and its growth into the world beyond Brazil. Also attending the meeting was the Brazilian photographer Luis Eduardo Pomar, the editor of the film "Wine of the Souls," a 2007 documentary that follows six foreigners along their paths in search of healing, self-discovery and mystical experiences in a Santo Daime community in the Brazilian Amazon.

The Ayahuasca Track was a mixture of health sciences, social sciences, and reports on personal experiences with the brew. Among tables, statistics, tough sociological debates and prayers to Mother Earth, the group worked intensively during three days, with most of the rooms at full capacity throughout. The track was a universe unto itself inside the conference, and it seemed that participants in the other two tracks were somewhat unaware of what happened there, and vice versa. The panels included topics such as ayahuasca as psychological therapy, its effect on cognition and mental health, its use in the treatment of addiction and the treatment of cancer, its relationship to spirituality, arts, sex and music, public policies relating to its use, and so forth. The presenters were mainly from the United States and Canada, but more distant places were also represented, including Brazil and Europe, among others. The panelists included psychologists, psychiatrists, workshops facilitators, anthropologists, doctors, lawyers, disciples, teachers, public policy administrators, writers and even a politician.

It is noteworthy that some talks were not academic in nature, but rather self-reflections of the practitioners on their own experiences or basically institutional presentations by ayahuasca retreat centres. In fact, these seemed to be the most popular talks in the track. Some of these sessions were followed by questions such as, "I drank ayahuasca and felt pain; what does this mean?" "I took ayahuasca and slept; why does this happen?" "Why did I have such a vision?" "I had this trauma in my childhood and I wonder if taking ayahuasca could help me overcome this?" etc. This gave a strange flavour to a conference that identified itself as scientific and aimed to create political legitimacy for the use of psychedelic medicines. MAPS staff's selection of a significant number of these presentation proposals for the track and the unexpected questions

posed by the public underscored the lack of institutional or intellectual space to formally discuss the implications of the worldwide expansion of ayahuasca use and the challenges of those who organize and participate in contemporary ayahuasca workshops.

Although some aspects of the Ayahuasca Track seemed to represent a non-scientific self-help spirit, one could argue that by accommodating such diverse audiences and presenters MAPS is also helping to develop a culture of public education and awareness about the use of ayahuasca, and giving professionals such as psychotherapists a rich view of the experiences and concerns of individuals who use and are affected by ayahuasca. A format in which personal expectations and problems are shared may also be helpful to those therapists who are interested in developing guidelines for ethical use of ayahuasca when given in a psychotherapeutic context, as opposed to a religious or shamanic one. In fact, one of the missions of MAPS is to create protocols for the therapeutic use of psychedelics. Beside the scientific and educational goals of the conference, the decision of the MAPS organisation to include some presentations geared to audiences more interested in decoding their own experiences than in scientific data may have been made in order to enhance the opportunities for future fundraising benefits arising from this partnership with the growing ayahuasca community.

Some of the new research presentations in the Ayahuasca Track deserve comment. Spanish psychiatrist J.M. Fábregas presented the results of research by a Spanish-Brazilian collaborative team coordinated by psychologist José Carlos Bouso from Spain. The study was executed in Brazil with a total of 56 ayahuasca-using volunteers from Santo Daime and 71 from Barquinha who were compared to a total of 56 from one rural control group of non-users of ayahuasca and 59 from another in an urban setting. In his first study, the research team enlisted 56 participants from the CEFLURIS branch of Santo Daime living in the Amazonian jungle community of Céu do Mapiá who had experience using ayahuasca for at least 15 years a minimum of 4 times a month and compared them with a control group of 56 non-users from a similar neighbouring rural town in the Amazon. In the second study, 71 members of Barquinha, an ayahuasca religion found in the city of Rio Branco, were compared to an urban group of 59 participants who did not drink ayahuasca. These studies included follow-up assessments at one year. The research concluded that the ayahuasca-using group scored significantly lower in the measures designed to determine issues with medical health, alcohol use, and psychiatric issues. Ayahuasca users scored in the normal range on personality tests and also scored significantly higher on a test to measure spiritual orientation and purpose of life, reflecting the value of transcendence found in these traditions.

The most notable aspect of this research was the absence of any indication of neurological impairment after decades of regular ritual ayahuasca use, as measured by tests of executive functions and memory. In fact, members of the ayahuasca-using groups scored higher than the control groups on some of these tests, indicating a lack of the functional impairments characteristic of neurotoxicity. The results suggest that ritual use of ayahuasca does not create the psychological or neurological problems that are normally associated with the problematic use of certain drugs. Considering the goals of the MAPS conference, this could be the most important presentation in the entire track. Not only did the research team present systematic data using matched control groups on a large cohort of long-term ayahuasca users, this presentation was also important because it actually announced new research findings. These findings have implications regarding the relationship of ayahuasca to mental health and the possible therapeutic potential of ayahuasca. Shortly after the conference ended, part of this research appeared in *Drug and Alcohol Dependence* (Fábregas et al., 2010); a series of articles based on this research will follow in other academic journals.

Dr. Leanna Standish (McIlhenny et al., 2009), a physician and neuroscientist, presented a research protocol to study the physiological and psychological effects of ayahuasca and its impact on neurochemistry. Sixty-six healthy adults will participate in two studies: in the first one, volunteers naïve to ayahuasca will participate in a Phase I, single-blind, placebo-controlled, dose-finding, dose-escalation study; in the second one, volunteers naïve to all hallucinogenic substances will participate in a Phase II, double-blind, placebo-controlled, randomized study. For this project, she assembled what she called a “dream team” of researchers, including Rick Strassman, who has also done important research with DMT in the past. Although this study repeats some aspects researched by Jordi Riba’s team in Spain and by Charles Grob’s Hoasca Project team in Brazil (Callaway et al., 1999; Grob et al., 1996), it is the largest study of its kind that has ever been proposed in the United States about ayahuasca. The location in which a study is conducted is important because the US Food and Drug Administration (FDA) normally gives more weight to drug trials performed in the United States when considering whether or not to approve the use of those drugs. The group has already had its project approved by a Human Ethics Review Board, and is anticipating a positive funding decision from the National Institute of Health in the United States.

Philippe Lucas and his collaborators reported that researchers in Canada have begun a new protocol to study the use of ayahuasca to treat the problematic use of drugs. This protocol will soon go through the ethics review process at the University of Victoria. The proposed research will examine outcomes of a five-day retreat focusing on addiction and stress led by a Canadian physician with extensive experience in the treatment of substance dependency. The retreats will include two ayahuasca sessions led by Western apprentices of Guillermo Arevalo, an internationally famous Shipibo shaman who has his own center near Iquitos, Peru. This study proposes to examine a psycho-social construct for compulsive behaviors and addiction that the researchers have termed “internal freedom,” and will include a 6 month follow-up with the 20 participants.

The authors mentioned legal issues regarding their enterprise, as ayahuasca is on shifting policy ground in Canada. The Canadian federal government has approved “in principle” a legal exemption for the Santo Daime’s explicitly religious use of the brew (Kenneth Tupper, personal communication, 2010), but not for shamanic or therapeutic uses. The study was designed to be similar to observational protocols used to investigate the use of illicit substances such as cocaine in urban communities. Other researchers at the conference also presented studies with results obtained in pre-existing contexts at anonymous sites to protect the identities of their subjects.

Stephen Trichter, a psychotherapist from San Francisco, pointed out the value of applying “true psychoanalytic theory” to the field of psychedelic psychotherapies, which is generally dominated by a transpersonal perspective. He suggested that the use of ayahuasca has often been seen through lenses of both medicalisation and a spiritual romanticism, and stressed the need to develop integration of the experience. Western consumers of ayahuasca may have expectations that the shaman they consult will deliver instant healing (“drive-through shamanism”). Shamans themselves may cooperate in the idealized projections of those who seek their expertise, either out of naivety or greed. Trichter noted the dangers of transference processes between shamans and ceremony participants, such as in the case of women who fall in love with the shamans they drink ayahuasca with. This topic seems to be a recurring issue in the field, but was largely commented on outside of the presentations. He proposed the idea of creating a follow-up service for ayahuasca consumers, where they would have the chance to discuss their experiences afterwards with trained therapists. In this setting, they could interpret their visions in a way

that was culturally relevant for them, as an alternative to the interpretations from the unfamiliar cultural contexts of indigenous or mestizo healers. Despite the criticism of some that this approach ignores the physical and spiritual dimensions to focus exclusively on the psychological one, it is a fact that many practitioners are Western, already familiar with the psychotherapeutic model, and do not identify with religious or shamanic interpretations. It may be that they have participated in shamanic or religious rites with ayahuasca, but felt that “there was something missing.” In our point of view, this approach would be problematic only if it were to require *all* ayahuasca experiences to be supervised by psychotherapists. However, this model could provide a growing segment of ayahuasca users with integrative tools to get the greatest benefit from their experience.

Thousands of miles from the Amazon where the vine grows, there was evidence of a vibrant West Coast ayahuasca culture at the conference. Also in evidence was the existence of a small but expanding population of underground therapists in the United States, and in other countries, who work with these plants. These interesting developments ought to be recorded for scientific purposes. One fascinating research possibility would be a study in which both therapists who treat and patients who drink would be interviewed. However, assembling a scientific protocol and taking into account considerations of legality, availability of ayahuasca, and the confidentiality of patients would make this type of research difficult to undertake.

Robert Forte, a long-time scholar and activist whose first book, “Entheogens and the Future of Religion,” (Forte, 1997) helped promote the word “entheogens,” spoke about his current fieldwork in Peru. He presented what he called “guerrilla research,” a study promoted without authorisation of ethics committees and not connected to any university. For under \$10,000.00, Forte recruited two subjects with cancer, one a psychiatrist and the other a schoolteacher, and brought them to Mayantuyacu to be treated by the *curandero ayahuasquero maestro* Juan Flores. Both subjects were tested for cancer antigens before and after the month-long journey. According to his report, both patients showed noticeable improvement, but the results are still inconclusive. Forte is planning a return to the field soon. His work poses interesting questions about academic ethics and the challenges associated with the establishment of alternative models to study the benefits of ayahuasca and indigenous medicine outside of the repressive structure of U.S. Drug Policy.

Roy Haber, lawyer for the Oregon-based Santo Daime Church of the Holy Light of the Queen, and former Deputy Chief of the Civil Rights Division at the Department of Justice under President Carter, reported on the legal victory of Santo Daime in Oregon in 2009 (Church of the Holy Light, 2010; Labate & Meyer, 2009) which allowed a branch of this church to legally use ayahuasca in their rituals. He narrated how he built the strategy for this victory during the preceding years. His plan consisted first in obtaining recognition from the Oregon State Board of Pharmacy regarding the safety of ayahuasca. One wonders if the rapid decision about the Santo Daime case in less than six months is also an acknowledgment of the successful UDV case in 2006 (Gonzales, 2006). The tensions between the UDV and Santo Daime communities in the United States and the relationship between their campaigns for legal protections in North America would be a fruitful avenue for future research.

One important dimension somewhat lacking at the conference was the discussion of the ethical, political and methodological challenges involved in the creation of standardized clinical trials to study the therapeutic potentials of ayahuasca. This is a topic especially salient at a conference that proposes to make psychedelics available to a larger segment of society. Stanford medical student Brian Anderson and Beatriz Labate (Labate et al., 2010) mentioned

some of those questions and the dilemmas around them in their presentation: should randomized double-blind experiments with control groups be used within the context of religious or shamanic ceremonies or should such studies be carried out only in the secular laboratories of modern hospitals? Would it be possible within an experimental design to create spiritual settings with “standardized leadership?” What are the challenges in administering ayahuasca in the form of a pill for the purposes of scientific research? These questions are related to one of the main problems of experimental research design; that is, the attempt to separate “religious,” “pharmacological” and “psychotherapeutic” variables. Although this is a difficult and perhaps impossible task, it would have been helpful to dedicate some part of the track to these issues. In most areas of psychedelic medicine it is well-established that it is medical personnel who will administer the treatment. In the case of ayahuasca, the question of who would be licensed to treat seems to be much more open and not well discussed; would it be shamans, *padrinhos*, *mestres*, therapists, or physicians?

Another important discussion absent from the track relates to reflections on the relationship between the researchers and their subject, or their relationship to ayahuasca itself. We learned from conversations with presenters before and after they spoke that almost everybody presenting there had some kind of ayahuasca practice. One of the presenters was undergoing a *vegetalista* diet in an urban context and brought her own special food to the conference. Yet there was little critical reflection on the implications of the personal involvement of the researchers in the production of their studies. Few presenters addressed this openly. Among these was the psychiatrist Luís Tofoli, a member of the União do Vegetal (UDV), who presented a paper on mental health as assessed by an epidemiological surveillance system used by this group, repeated often and openly that we should take into account that he was speaking as “a member of the UDV” and therefore we should hear all he said “through a filter.” In what appears to be an exception in the ayahuasca field at large, the transpersonal psychologist and ayahuasca workshop facilitator Sylvia Polivoy, an Argentinean resident working in Bahia, Brazil, declared that she no longer drinks ayahuasca herself in the workshops she leads because she was “too sensitive and did not need it anymore.” In a paper (Trichter, Klimo, & Krippner, 2009) that partly grounded his presentation, Stephen Trichter wrote that, despite the fact that it seemed to be an expectation for the participants of his study, he did not take ayahuasca in the sessions he observed because this would be unethical in the field of psychology. He explained later that he believes being under the influence of ayahuasca might impair his ability to collect data, he was concerned about issues of legality (cf. MacRae, 1998), and he felt his role was to collect data on participants rather than to report on the effects of his own subjective experience. This perspective is clearly different from the anthropological one, where one’s own experiences are considered a legitimate part of what is called participant observation. It could be fruitful to address these issues on an interdisciplinary and comparative basis, since social sciences, psychology and biomedical studies rely on different methodologies but nevertheless face similar difficulties.

The Ayahuasca Track concluded with a meeting of ayahuasca researchers, which had a larger turnout than the organizers expected. A Shuar shaman, who was not among the official presenters of the track, occupied a good part of this gathering, speaking for a long time and playing the flute. While some seemed enchanted, others left during his talk. The different reactions to the native man’s participation expressed the variety of interests present in the conference and exemplified its hybrid nature.

The popularity of the Ayahuasca Track suggests that it could be profitable to promote a conference focusing exclusively on ayahuasca in the near future. This might include a scientific track composed of several disciplines, and another one by leaders and

practitioners of ayahuasca ceremonies. Even though this division might seem problematic because it stresses complicated conceptual dichotomies such as “culture” versus “nature,” “mind” versus “body,” “science” versus “knowledge,” and “religion” versus “superstition,” it would be a way to welcome the inclusion of native knowledge. The study of psychedelics also leads to reflections on and criticism of current scientific paradigms and the limits inherent in the division of disciplines.

We did not follow the other tracks of the conference so we cannot evaluate them here. However, from discussions with those who did attend, the impression we got was that, as with the Ayahuasca Track, many of the most interesting reflections happened outside of the conference rooms, and at the private researchers meeting which took place for two days after the conference. This private meeting was for the researchers who are conducting clinical studies with human subjects and was closed to the public so that the researchers could provide their peers with critical commentary about study design, subject recruitment, research goals, and other topics. One issue that arose in these discussions concerned the relationship of the researchers to the media; some think cultivating this alliance is beneficial, while others are against it. Another related issue is that of presenting unpublished data at the conference; whereas some researchers were completely secretive about their studies, others were dismayed that their colleagues hid their important new findings in order to preserve them for future publication. Once again, these topics could be discussed in a future conference in a properly set format.

A general observation can be made about this field: that it is much easier to preach to “converted” audiences (people who are already enthusiastic about these substances) than to mainstream psychiatrists, policy makers, religious organisations, educators and other agents immersed in the prohibitionist international drug control logic. However, we can hope that the effects of the conference will reverberate beyond this small but growing group of aficionados and researchers to have an impact in the broader field of drug studies and in popular culture at large. In any case, it is a fact that the conference helped reinforce the ties connecting the global ayahuasca-using community, with a very nice multi-ethnic, sexually diverse and psychedelic California feel to it.

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Beatriz Caiuby Labate is an anthropologist, Research Associate at the Institute of Medical Psychology at Heidelberg University, member of the Collaborative Research Center (SFB 619) "Ritual Dynamics – Socio-Cultural Processes from a Historical and Culturally Comparative Perspective" and researcher at the Interdisciplinary Group for Psychoactive Studies – NEIP.

Clancy Cavnar is a Psy.D. candidate at John F. Kennedy University in Pleasant Hill. She is also a researcher at the Interdisciplinary Group for Psychoactive Studies – NEIP.