10

The treatment and handling of substance dependence with ayahuasca: reflections on current and future research

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This text presents a series of reflections on the therapeutic potential of the ritual use of ayahuasca in the treatment and handling of substance dependence problems. Anthropological and psychiatric data on the ritual use of ayahuasca for 'healing' dependence in psychotherapeutic centers (in Peru and Brazil), as well as in ayahuasca religions (in Brazil), are reviewed and critiqued. Methodological, ethical and political considerations for current and future research in this area are then discussed, and an interdisciplinary agenda for studies on the use of ayahuasca to treat or handle substance dependence is proposed.

Introduction

Problems related to dependence[1] on psychoactive substances, both legal and illegal, pose serious challenges for international public health. According to the World Health Organization (WHO), tobacco not only has a high dependence potential, but it is also the cause of one in ten adult deaths worldwide (WHO 2008). Also, the use of many illegal substances with significant dependence potential, such as cocaine, heroin and methamphetamine, carries risks such as overdose, the transmission of HIV, and the exacerbation of other medical and psychiatric conditions (UNODC 2007).

1. The concept of 'dependence' can be critiqued from various points of view (for a discussion from a social sciences perspective, see Fiore 2007). We have decided to use this term, however, because of its wide circulation in the specialized biomedical literature and because it is a relevant category in the native discourses discussed here. In these latter discourses there frequently appears also the term 'addict' [*viciado*], which evokes images of moral deviance, perversion and illness, as well as often functioning as an accusatory category (Velho 1987), and was therefore left aside here.

A number of different pharmacological and psychotherapeutic interventions are used by health professionals in the treatment of substance dependence (Sadock and Sadock 2005). Self-help groups, such as Alcoholics Anonymous and Narcotics Anonymous, as well as therapeutic communities and religious groups, are dedicated to reducing the harmful use of psychoactive substances (Galanter 2006; Silveira and Moreira 2006; Sanchez and Nappo 2007).

A particularly interesting (and today relatively unknown) chapter in the treatment of dependence was formed around the use of psychedelics[2] as adjuncts to psychotherapy during the 1950s and 1960s (Grinspoon and Bakalar 1979).[3] Halpern, in careful reviews of the subject (1996, 2007), argues that the imprecise criteria for defining dependence and recovery, as well as the diversity of the procedures adopted in the various clinical trials, make it difficult to reach definitive conclusions about the efficacy of the psychedelic-assisted treatments developed in that era. He suggests, however, that the forced interruption of these studies in the beginning of the 1970s prevented the appropriate follow-up of promising initial evidence**.** Due to the limitations of current strategies for dependence treatment (Silveira and Moreira 2006) and contemporary rethinking of the War on Drugs, there has been a slow but growing resurgence of interest in the use of psychedelics as therapeutic agents in the treatment of dependence on psychoactive substances.

For example, ketamine, which has psychedelic properties at sub-anesthetic doses, has been used with promising, although preliminary, results in clinical trials for the treatment of heroin and alcohol dependence (Krupitsky and Kolp 2007). There is also growing evidence of substantial effects of ibogaine – a psychedelic extracted from the African shrub *Tabernanthe iboga* – in the relief of craving associated with heroin and other

2 The term 'psychedelic' denotes an agent that provokes the 'manifestation of the mind' (Osmond 1957); in this article we have chosen to use the term 'psychedelic' in place of 'hallucinogen' to designate this class of psychoactive substances for reasons rooted in both the biomedical and social sciences. On the one hand, restricting oneself to the domain of perceptual alterations, 'hallucinogen' suggests detrimental effects to the wide range of affective and cognitive functions known to be influenced by this type of substance (Graeff 1984). The term 'hallucinogen' is also questionable because psychedelic perceptual alterations are normally distinguished from ordinary reality and attributed to the effects of the psychoactive substance, which thus does not fit the classic meaning of hallucinations as 'perceptions that the perceiver himself firmly believes indicate the existence of a corresponding object or event, but for which other observers can find no objective basis' (Barron *et al.* 1964: 29). On the other hand, the term 'hallucinogen' is not adequate from a native point of view because, classically, 'hallucination' suggests that the affective and cognitive alterations caused by this type of substance are of a detrimental or pathological nature (Goulart *et al.* 2005), whereas many ayahuasca users would claim that their mental faculties are enhanced, rather than hampered, by ayahuasca. Finally, to complicate matters further, the distinction between 'illusion', a perceptual alteration that is distinguished from reality, and 'hallucination', a perceptual alteration that is not distinguished from reality, is not always applicable in the case of ayahuasca, as many ayahuasca users believe that their perceptions while under the influence of ayahuasca are indeed real, if not more than real.

3 In the 1950s Osmond and Hoffer, working in Saskatchewan, Canada, developed psychedelic therapies for the treatment of alcoholism with LSD (Hoffer 1967). Stanislav Grof, in turn, adopted the use of LSD to treat heroin dependent individuals in Prague, and later in the United States. Psychedelic therapies were characterized by the ingestion of a large dose of a psychedelic substance with the goal of provoking a 'peak experience', a profound mystical experience capable of generating a radical transformation (Grof 2001). Psycholytic therapy, another model, used primarily in Europe, was marked by the use of ordinary psychoanalytic techniques (in group or individual sessions) in conjunction with the consumption of small doses of LSD or psilocybin (Grinspoon and Bakalar 1979; Grob 2002; Passie 2007).

opiates (Alper and Lotsof 2007). The ritual consumption of peyote in the Native American Church, and of ayahuasca in various contexts, have also attracted the attention of specialists as potential tools for the treatment of alcoholism and problems resulting from the dependence on numerous other substances (Albaugh and Anderson 1974; Dobkin de Rios *et al.* 2002).

The aim of this article is to consider the therapeutic potential of the ritual use of ayahuasca – a dimethyltryptamine (DMT) containing a decoction originating among the indigenous peoples of the western Amazon basin – in the treatment and handling of problems related to dependence on psychoactive substances. 'Treatment' is here defined as a systematic intervention for substance dependence; the 'handling' of substance dependence is considered to comprise non-systematic interventions carried out secondary to a religious practice. We bring together evidence from the specialist literature and from our field observations of two types of institutions engaged in treating or handling substance dependence: psychotherapeutic centers that combine elements of biomedicine with the ceremonial use of ayahuasca, such as Takiwasi (in Peru) and IDEAA (in Brazil); and Brazilian ayahuasca religions, namely Santo Daime and the União do Vegetal. As it will be seen, it is no simple task to analyze the therapeutic potentials of ayahuasca, particularly for mental health problems. We summarize and critique the available evidence and we conclude by presenting several methodological, ethical and political considerations, which we feel are essential for the development of future interdisciplinary research into the question of how ayahuasca may be used to ameliorate substance dependence.

Two psychotherapeutic centers for the complementary treatment of substance dependence with ayahuasca

There are currently two main substance dependence treatment centers that use ayahuasca: the Takiwasi Center for the Treatment of Drug and Alcohol Addiction and the Research of Traditional Medicines,[4] in Tarapoto, Peru, and the Institute of Applied Amazonian Ethnopsychology [Instituto de Etnopsicología Amazónica Aplicada] (IDEAA), located on the banks of the Prato Raso creek, a tributary of the Igarapé Mapiá, near the Santo Daime community Céu do Mapiá in the municipality of Pauini, Amazonas state, Brazil. There are reports of other centers, groups, and individuals who treat substance dependence with ayahuasca, although this is not their central focus. Both Takiwasi and IDEAA practice particular forms of complementary medicine and neither has an institutional alliance with biomedical dependence treatment centers.

Takiwasi

Takiwasi was co-founded in 1992 by Jacques Mabit, a French doctor and naturalized Peruvian. The local *curanderos*, doctors, psychologists and therapists who work there explore

4. www.takiwasi.com

the curative potentials of Western therapies together with techniques from traditional Amazonian therapies, using ayahuasca, herbal emetics, *dietas* (isolation in the forest with fasting and the ingestion of various plants), *sopladas* (blowing tobacco smoke or *agua florida* [perfumed water]), *chupadas* (the sucking out of a pathogenic object),[5] communitarian life, manual and artistic activities, and psychotherapy. The primary emphasis is on the treatment of dependence on cocaine paste, an intermediary in the cocaine manufacturing process, which is cheap and thus widely consumed in the region. Dependence on alcohol and heroin, among other substances, is also attended to (Mabit 1996a, 1996b; Mabit *et al.* 1996; Mabit, 2002, 2004, 2007).

According to Mabit (personal communication, March 2009), since its foundation Takiwasi has treated more than 700 patients. In one of his various writings Mabit presents the results of an uncontrolled pilot study, conducted by Giove (2002), of the center's first seven years of activity (1992–8); these results were that, of a sample of 211 patients, after treatment 31 percent were feeling 'well' and 23 percent 'better', while 23 percent were 'the same or worse', and the condition of the remaining 23 percent was unknown.[6] Mabit adds that if only the patients who completed the entire program are considered, the rate of positive results increases to 67 percent. Although Mabit's various writings indicate beneficial effects of Takiwasi's treatments, so far no investigator has elaborated a research protocol which would permit the collection of data with sufficient scientific credibility to verify these claims. Paradoxically, while the center largely works in the style of the local *curanderos* who do not consider such studies to be necessary for proving their therapies to be efficacious, Takiwasi would need to utilize such studies in order to gain the legitimacy it seeks within the realm of international academic debates about the utility of using ayahuasca in the treatment of substance dependence.

IDEAA

Another psychotherapeutic center, similar to Takiwasi, is the Institute of Applied Amazonian Ethnopsychology (IDEAA), created by the Spanish psychiatrist Josep María Fábregas. IDEAA combines therapeutic techniques derived from Amerindian shamanic traditions, the Santo Daime religion (see below), Gestalt therapy, and humanistic and transpersonal psychology (Villaescusa, 2007; Fernandez, in press). While IDEAA is chiefly concerned with problems related to dependence, the center also receives patients with psychological and physical disorders, as well as otherwise healthy clients in search of self-awareness or personal development. The Institute's therapists and 'users' (as the clients are known within the institution) live together in a small communitarian group.

IDEAA's therapeutic program includes manual labor, sessions with ayahuasca, and

5. These features are characteristic of Peruvian *vegetalismo*. For an overview of the subject see Luna (1986).
6. These terms are defined by Mabit to mean the following: 'well' – 'satisfactory development, with the problems apparently resolved thanks to a true structural change at various levels in the patient's life'; 'better' – 'satisfactory development with structural changes evident, but vestiges of the original problem remain'; 'the same or worse' – 'a return to using the substance(s), albeit in a more discreet form, without a convincing structural change, and frequent exchange of previous substances for alcohol' (2002: 31).

group integration sessions, as well as interactions with the neighboring Santo Daime community Céu do Mapiá. According to one of the resident therapists, Xavier Fernandez (in press), the principal objective of IDEAA is to engage the individual in a process of introspection and self-awareness. Thus, the program also includes individual sessions with ayahuasca, as well as Eastern contemplative practices, such as Zen meditation and yoga. No quantitative measures of IDEAA's dependence treatment efforts have been divulged so far. Recently, however, a qualitative research project on the institution has been started, based primarily on user narratives of their experiences, with a follow-up on their condition one year after the end of their treatment. These data are currently being processed (Villaescusa, 2007; Fernandez, in press).

Although both Takiwasi and IDEAA treat Western patients suffering from substance dependence by using complementary approaches centered on the ritual use of ayahuasca, several differences between the two centers deserve mention. Takiwasi is older, more established and has generated more visibility and publications (see Presser-Velder 2000; Denys 2005; Sieber 2007; Bustos, 2008; among others) than IDEAA, which maintains a lower international profile. The Takiwasi program is relatively long, obliging their patients to stay for nine months, whereas that of IDEAA can vary from a few weeks to several months; and while Takiwasi's activities are almost exclusively directed at dependence treatment, the same cannot be said of IDEAA. Furthermore, the Takiwasi model follows more closely that of a biomedical addiction treatment clinic, utilizing isolation, rigid discipline and a stern atmosphere, while the IDEAA model is more reminiscent of a spiritual retreat and has a freer and more flexible ambiance. At Takiwasi, ayahuasca sessions are conducted weekly and are based on the Peruvian *vegetalismo ayahuasquero* healing tradition, with strong elements of Catholicism (including exorcist prayer); IDEAA, on the other hand, offers rather simple ayahuasca ceremonies that appear to be influenced by the Santo Daime religion as well as the Western psychedelic and psycholytic therapy styles that emerged in the 1950–70s. While neither Takiwasi nor IDEAA has produced reliable quantitative data on their treatment success rates, people continue to seek out these centers for a complementary approach to dealing with substance dependence. Future research on the work of these and other such psychotherapeutic centers needs not only to include quantitative measures of abstinence and remission, but also to explore how distinct beliefs and ritual styles reflect and influence the process of dependence, its conceptualization as a 'problem' or 'disease', and the resultant strategies used to treat it.

Two ayahuasca religions and the handling of dependence

The Brazilian ayahuasca religions comprise three principal traditions: Santo Daime (with two main branches, Alto Santo and CEFLURIS), Barquinha, and the União do Vegetal (UDV).[7] In general, these groups are all heirs to a single religious and cultural complex

7. For general information on these three groups, see Goulart (2004), Labate and Araújo (2004), Labate and MacRae (2006) and Labate *et al.* (2009), among others. For information on smaller, neo-ayahuasquero

which includes Amerindian shamanism, Christianity (above all the folk Catholic expressions of Brazil's northeast), the Afro-Brazilian religions, esoteric currents of European origin (such as Kardecist spiritism), and, importantly, a general culture of 'spiritual healing' and 'spiritual evolution' centered around the use of ayahuasca and the religious teachings of the groups' founders. Here we discuss Santo Daime (specifically the CEFLURIS branch) and the UDV – the two largest ayahuasca religions, with around 4000 and 15,000 members respectively (Labate *et al.* 2009). It is important to note that these religions do not follow formal protocols when dealing with dependence problems, and hence participation in their ceremonies should not be seen as constituting a substance dependence treatment. They are, however, often engaged in the informal handling of substance abuse and dependence issues, due to the fact that (according to their members) their organizations are frequently sought out by people suffering from such afflictions. Given these similarities, Santo Daime and the UDV nevertheless have quite different drug cultures, or different styles of dealing with problematic and non-problematic drug uses; these cultural differences will be touched upon below. The existing academic studies on the handling of substance dependence in Santo Daime and the UDV are here presented in chronological order, by religion, so that the reader can follow how this field of investigation has developed over time.

Santo Daime

Santo Daime was founded by Raimundo Irineu Serra, or Mestre Irineu (1892–1971), in the early 1930s in the Brazilian state of Acre. It encompasses two principal religious denominations: the set of groups generically identified as the 'Alto Santo line' and the set commonly called the 'Santo Daime or Padrinho Sebastião (Mota de Melo) line', with most groups in the latter line being linked to the Raimundo Irineu Serra Eclectic Center of the Universal Flowing Light [Centro Eclético da Fluente Luz Universal Raimundo Irineu Serra] (CEFLURIS), recently renamed the Church of the Eclectic Cult of the Universal Flowing Light Patron Sebastião Mota de Melo [Igreja do Culto Eclético da Fluente Luz Universal Patrono Sebastião Mota de Melo].[8] CEFLURIS has spread to several countries around the world, and its centers are generally characterized by a rather loose structural organization and a high rate of membership turnover. This group is also characterized by the quite eclectic and dynamic nature of its cosmology.

In our fieldwork over the past decade we have observed that in Santo Daime, especially in the lineage of Padrinho Sebastião, the consumption of illegal psychoactive substances

groups located in urban areas, many of whom have splintered off of one of these three main traditions and now function autonomously, see Labate (2004). One of these groups, the Associação Beneficente Luz de Salomão (ABLUSA), in Mogi das Cruzes (São Paulo) is known to have run a small social program with ayahuasca rituals for homeless individuals, including those with substance dependence problems (see Labate 2004; Mercante 2007); this program started in 1999 but has since ceased to exist according to reports collected by us in 2007–8.

8. In this text, however, we continue to use 'CEFLURIS' because in practice this denomination continues to predominate among both members and academics despite the official change. For more information about this group, see MacRae (1992), Goulart (1996), Groisman (1999), Cemin (2001) and http://www.santodaime.org among others.

and the problematic or dependent use of alcohol are looked upon with disapproval. In general, the majority of Daimistas (Santo Daime members) do not drink alcohol; some say it is 'incompatible with Daime' to do so. However, moderate drinking is not forbidden, just as there is no official ideology forbidding the use of cigarettes. Within the Daime groups, there is a kind of common sense notion that 'Daime cures addiction to drugs and alcohol'.

The topic of handling substance dependence in a Santo Daime community is touched upon briefly by Isabel Santana de Rose (2005) in her master's thesis in anthropology on Céu da Mantiqueira, a Daimista church in Camanducaia (Minas Gerais state). According to Rose, this group has developed practices particularly focused on the recovery from substance dependence. Various psychiatrists and other health professionals participate in this church, which is known in the region and in the Daimista community at large as a healing center.[9] A few initial 'successes' stimulated the group to create a specialized clinic in concert with the center's ritual space in order to elaborate their substance dependence work. Accounts collected indicate that the clinic only operated for a short time before it was abandoned.

Only one explicit study of recovery from substance dependence in Santo Daime exists thus far (Labate *et al.*, in press). In this preliminary study, conducted with 83 members of CEFLURIS between the ages of 18 and 40 (41 men and 42 women), 90 percent of the individuals identified as dependent according to DSM-IV criteria self-reported abandoning their dependence on one or more psychoactive substances after a period of participating in Daime rituals. These rates of 'recovery' should, however, be viewed with caution, since the study has important limitations, as the authors themselves note. These limitations include: the lack of a control group to compare to the surveyed Daimistas; the absence of subjects who tried unsuccessfully to treat their dependence and subsequently left the church; the very broad definition of 'recovery' used in the study, which included those individuals who had discontinued the use of merely one substance even though they had reported initially being dependent on two or more substances; and the exclusion of *Cannabis* consumption from the analysis of substance use patterns (we return to the particular issue of *Cannabis* below).

União do Vegetal

The Union of the Vegetal Beneficent Spiritist Center [Centro Espírita Beneficente União do Vegetal] (CEBUDV), or União do Vegetal (UDV), was founded in 1961 in Porto Velho, Rondônia state, by José Gabriel da Costa (1922–71), also known as Mestre Gabriel.[10] The UDV is the largest of the three ayahuasca religions, with about 15,000 'disciples' (members) in Brazil, the United States, and Spain, in addition to other countries where it is just

9. The Céu de Maria church, in São Paulo, is also known within the Daimista ranks as a place that often receives drug dependent individuals from various social strata. In this group, the local *comandante* (religious leader) is known to speak of having been 'cured' of cocaine addiction through Daime. It is also said that a lot of poor 'junkies' from São Paulo show up there looking for help. No formal investigations of this church have been carried out so far.

10. For more information, see: Andrade (1995); Brissac (1999); Goulart (2004); Labate and Pacheco (in press), among others.

establishing a presence (Labate *et al.* 2009). The UDV is the most hierarchical, organized and bureaucratic of the ayahuasca religions; it also has demonstrated the greatest interest in legitimizing the use of ayahuasca from a scientific and biomedical perspective (ibid.).

In the União do Vegetal, the use of all psychoactive substances, including legal ones such as alcohol and tobacco, is strongly discouraged.[11] As stated in an official publication of the religion, 'The União do Vegetal categorically condemns the use of drugs, alcoholic drinks, and other vices. It considers them incompatible with spiritual evolution' (CEBUDV 1989: 2, our translation). In general its members neither smoke nor drink, and the consumption of all illegal drugs is sternly condemned. There is a strong emphasis on the idea that the use of Vegetal (ayahuasca) in the UDV 'helps in recovering from vices' and that it is important to 'help addicts'. During sessions, disciples commonly ask permission to speak on various topics, including personal problems such as their difficulty in quitting smoking or stopping using illegal substances. On these occasions they are advised by the *mestres* (high-ranking members) and encouraged by the group. A document entitled the *Regimento Interno* (Internal Regiment), and which is read aloud at each ritual session, states that should a disciple be seen in a drunken state, he or she will be warned by the center's leadership, and if the incident is repeated they may receive a 'punishment' – the gravest of these being the revocation of the right to communion of the Vegetal. A disciple may also be punished for the use of illegal psychoactive substances, though in practice this occurs less frequently. If a disciple smokes, drinks, or consumes illegal substances, he or she will likely not advance within the group's internal hierarchy.

There currently exist four small studies that have analyzed, directly or indirectly, the issue of handling substance dependence in the União do Vegetal: the Hoasca Project by Grob *et al.* (1996, 2004); a master's thesis in mental health by Labigalini (1998); a study of UDV adolescents led by Doering-Silveira *et al.* (2005); and a master's thesis in social sciences by Ricciardi (2008). The study by Grob *et al.* (1996) was conducted with 15 members of the UDV who had drunk ayahuasca ritually for at least ten years. According to the authors, five of the UDV members had histories of excessive consumption of alcohol under the criteria of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R). In addition, 11 members reported a history of moderate to serious use of alcohol before joining the UDV, and five of these described incidents of violent behavior (two of them had been arrested as a result of their violence). The research also revealed that four individuals reported abuse of other psychoactive substances, including cocaine and amphetamines, and that eight of the 11 with histories of moderate to serious alcohol use and abuse of other psychoactives were dependent on nicotine at the time of their first encounter with the UDV. All of the cases of substance abuse and dependence, however, were reported to have resolved without relapse after these individuals joined the UDV (Grob *et al.*, 1996, 2004).

Building on the work of Grob *et al.*, psychiatrist Eliseu Labigalini, Jr. (1998) developed a qualitative study of the subjective experiences of four individuals who had presented with serious alcohol dependence, two of whom were also dependent on cocaine, before

11. This does not include the psychoactive substances prescribed legally by physicians, such as antidepressants or other such medications.

joining the UDV. According to Labigalini, the four stopped consuming the psychoactive substances a few months after beginning to attend UDV rituals. Among the study's conclusions is the claim of the author that the interviewees did not substitute their dependence on alcohol for dependence on ayahuasca or the religious group – an idea likely to be suggested in the world of dependence research. Indeed, Labigalini affirms that the use of ayahuasca in which the UDV members came to periodically engage through the rituals did not present the psychopathological features of a 'compulsion'. Because it is based on short-term fieldwork, however, this study should be viewed with caution.

In the study led by Doering-Silveira *et al.* (2005), 40 adolescents who used ayahuasca in the UDV were compared with a group of 40 controls across various parameters, including the use of psychoactive substances over their lifetime, the previous year, and the previous month. No differences were found between the groups with respect to lifetime use. In the year prior to the study, significantly less use of alcohol was reported by the UDV adolescents than by those in the control group. Reported use of alcohol was also significantly lower among the UDV adolescents in the month preceding the study, as was the use of amphetamines. In the discussion, the authors indicate that despite their early exposure to the consumption of a psychoactive substance (ayahuasca), the UDV adolescents did not seem to be predisposed to a greater incidence of psychoactive substance abuse; on the contrary, the authors argue that their participation in a religious organization may offer the adolescents protection against the problematic consumption of psychoactive substances. They note, however, that the limitations resulting from the study's sample size did not permit the investigators to assess the impact that 'dimensions of religiousness' might have on the results. They emphasize, moreover, that the study's retrospective design can only establish correlations between the events studied, and not relationships of cause and effect.

Ricciardi (2008) conducted an ethnographic study of experiences of transformation, relief, and healing in the UDV. The study addresses the question of dependence, arguing that the context of the UDV is important in its prevention. According to Ricciardi, five of the 11 people she interviewed (each with between two and 13 years' experience with the UDV) reported having had, at some point in their lives, problems related to the use of psychoactive substances. All of them claimed that their participation in the UDV led to some improvement in their situation and reported having been 'cured' of dependence (p. 116). Although the interview reports collected by Ricciardi were not verified with standardized diagnostic questionnaires,[12] thus making her qualitative findings difficult to generalize, they do nevertheless provide an intimate glimpse of this phenomenon that may serve as a lead for more standardized studies in the future.

12. While standardized questionnaires are among the most widely used and informative tools employed in scientific studies within the fields of psychiatry and epidemiology, the validity of these instruments for measuring and assessing complex behavioral patterns, such as problematic substance use, is the object of continual discussion and debate. We will not take up this issue here, rather we merely wish to draw attention to the fact that the criteria of psychiatric diagnoses are complex, and not static; they must be reevaluated and updated constantly. For a discussion of the DSM-IV and epidemiological studies of drugs, see MacRae and Vidal (2006).

We have presented here two religions whose members regularly consume ayahuasca in a ritual setting and many of whom report spiritual and physical health benefits, including a decrease in use of, and even the cessation of dependence on, psychoactive substances that they view to be harmful. Only a few academic studies have been conducted on the recovery experiences of these groups' members, and the methodologies used include participant-observation, interviews and surveys. Importantly, all quantitative data collected has been derived from exploratory studies with small sample sizes, and control groups were not always used. In general, these studies report that among Santo Daime and UDV members there exists a common culture of 'spiritual healing' and 'spiritual evolution' that includes discouraging the abuse of psychoactive substances and attending to people seeking relief from dependence. At the same time, there are important differences between these two groups regarding how they deal with psychoactive substance use. The CEFLURIS Santo Daime line has an entheogenic spirit, being more interested in experimenting and exchanging knowledge with other psychoactive sacrament-using groups in the Americas and elsewhere; some members also had previously used, or currently use but in an extra-official manner, *Cannabis* as a sacrament (see below). The UDV condemns the use of any psychoactive substance other than ayahuasca, illegal or not. Another major difference is that in CEFLURIS there is a general healing culture where Daime is seen as a supernatural and powerful remedy for all sorts of diseases – a true panacea. The UDV, on the other hand, maintains a view of the Vegetal as a substance to be more strictly used to 'promote mental concentration and spiritual evolution'; the official discourse of the UDV states that Hoasca is not for the healing of the body. The institution represents itself as a Spiritist-Christian doctrine rather than as a popular healing or shamanic-curanderistic tradition, and it openly seeks legitimacy from the medical and scientific community (see Labate *et al.* 2009).

Ultimately, and despite their differences, both Santo Daime and the UDV endorse a distinction between the labels 'sacrament' (i.e., ayahuasca) and 'drug' (i.e., other psychoactive substances), their members differentiate themselves from drug users, and they employ a discourse of 'curing drug addiction' as a means of self-legitimization (see section below). Given the complex elements at play in these two Brazilian ayahuasca religions' practices of handling dependence problems, future investigations into this phenomenon need to consider several methodological, ethical and political questions such as those addressed in next two sections of this text.

Scientific research and legality: the case of Santa Maria in CEFLURIS

The relationship between research and legality is a question that must be confronted by scientific studies in this area. Investigations whose objective is to analyze the effectiveness of practices involving ayahuasca consumption in the treatment and handling of dependence must take into account the history of persecution of ayahuasca users in Brazil (MacRae 1992; Goulart 2004; Labate 2005; MacRae 2008, among others). This historical legacy may influence the statements offered by the members of these religions, since the fear that their highly valued practices could become prohibited or socially stigmatized still weighs heavily

upon these groups. The question of ayahuasca's therapeutic efficacy is particularly relevant to the field of ayahuasca studies and practices, not only because of its strong presence in the very cosmologies of some of the groups, but also because this could potentially allow for the differentiation of ayahuasca from other psychoactive substances (i.e., 'Ayahuasca is not a hallucinogen, but a sacrament that cures addicts').

An especially important issue to be considered for future investigations on the effects of ayahuasca use on psychoactive substance consumption is the use of *Cannabis sativa* within the CEFLURIS branch of Santo Daime, where it is known as Santa Maria. The political and ethical difficulties inherent in our broaching this subject here are problems shared by many studies involving the use of illegal substances (MacRae and Vidal 2006). During a certain period, Santa Maria was used regularly in the rituals of the Padrinho Sebastião lineage as a religious sacrament, above all in the Amazon forest (Monteiro da Silva 1985; MacRae 1998, 2008, among others). However, as CEFLURIS and groups identified with the spiritual teachings of Padrinho Sebastião spread to Brazil's major cities, the use of ayahuasca in Brazil became institutionalized and regulated within a legal framework while *Cannabis sativa* remained illegal. Eventually, CEFLURIS's national leadership decided to prohibit religious rituals with the plant.

The highest leader of CEFLURIS, Padrinho Alfredo Gregório de Melo, told us the following in a 2008 interview at the Céu de Maria church in São Paulo:

> We did a study of Santa Maria to cure the addictions [*des-viciar*] of people who used marijuana. Papa [that is, Padrinho Sebastião, his father] received [divine] instructions and we began to take this plant back from its worldly use … we began to learn to use it as a spiritual sacrament … a power plant … Using it with respect, Santa Maria can heal, too … This was during the time of [CEFLURIS communities at] Colônia Cinco Mil and Rio do Ouro … When the law clarified that its use was illegal [around 1982], we stopped doing our study. That's why we say we didn't 'close' Santa Maria, because the truth is that it was never 'open' … It was just an experimental period … Now, in this time of legalization, of normalization [of ayahuasca], we make a point of not permitting its use.

Other informants we spoke with, however, indicated that Santa Maria was still used frequently at Céu do Mapiá in the years following the termination of the 'study'. Whatever the case may be, the important thing to highlight here is that, as a consequence of an internal prohibition on the use of Santa Maria, the substance came to be consumed in an irregular, personal, and extra-official fashion (outside the context of ritual) by some members because it was already deeply rooted in the group's religious imaginary. This kind of use has promoted the social stigmatization of this Daimista denomination within the Brazilian ayahuasca field (Goulart 2004; Labate 2004; MacRae 2008).

Owing to the dynamic, ambivalent and partly conflicted nature of CEFLURIS's relationship with Santa Maria, and all the difficulties associated with the consumption of an illegal substance, the authors of the above-mentioned study on 'recovery' in CEFLURIS decided not to include *Cannabis sativa* in the survey of substance use administered in their study (Labate *et al.*, in press). However, despite the possibility of offending the group's religious sensibilities, a more incisive study would involve an investigation of members' patterns of Santa Maria consumption – be they therapeutic, recreational, or abusive in

nature. Such a study could also attempt a contextualized analysis of what said categories of consumption patterns mean – an issue that is not always sufficiently problematized in the specialist literature.

In the discourse of Padrinho Alfredo cited above, there is a distinction between 'sacrament' (Santa Maria) and 'drug' (marijuana), extending to this substance a significance derived from several of the ayahuasca religions' central argument about ayahuasca – that its proper ritual use is as a tool for humankind's salvation and healing. We suggest, as a hypothesis to be tested in future research, that the use of Santa Maria in conjunction with Daime within CEFLURIS might serve to help Daimistas recover from dependence on other psychoactive substances (e.g., crack or alcohol), perhaps even in a synergistic manner. Some incipient studies, including one of Brazilians who reported using *Cannabis* to overcome their dependence on crack, and another study of heroin users in the Netherlands who substituted the use of *Cannabis* for heroin, suggest that *Cannabis* may potentially be used with some success in the recovery from dependence on certain psychoactive substances (Sifaneck and Kaplan 1995; Grinspoon and Bakalar 1997; Labigalini *et al.* 1999; Lenza 2007). These studies, though far from providing a definitive judgment on the utility of *Cannabis* for alleviating dependence on other substances, do provide theoretical leads in support of our hypothesis.

On the other hand, it should be asked also whether some Daimistas have abandoned a problematic pattern of use of one psychoactive substance, but maintain problematic use patterns of *Cannabis*. The possibility that this occurs in at least some individuals, and whether there exists a noticeable trend towards this behavior, may be verified through future investigations. Such research should also take into account the specific psychoactive properties of ayahuasca and of *Cannabis*, and the implications of this interaction for lived experience and for the treatment of dependence in particular, as well as the effects perceived and attributed by Daimistas to each of these plants, and their understanding of possible problems stemming from their use. The question of the interaction of ayahuasca and *Cannabis* also allows us to consider the close theoretical relationship between the consumption of supposedly recreational psychoactive substances used in an un-structured way, and the consumption of substances held to be sacred in ways described as structured. Building on the work of Edward MacRae (2008), our field observations also suggest that, in effect, the illegality of *Cannabis* and the legality of ayahuasca in Brazil influence the consumption patterns of these substances. The fact that *Cannabis* use is prohibited prevents the development and stabilization of a particular set of sacred symbols around this substance and prevents the establishment of ritual controls for its use, unlike what occurred in the case of Daime, where the religious pantheon was creatively developed and highly ritualized forms of cultivation, distribution and consumption were consolidated.

This question might also be analyzed through a systematic comparison between CEFLURIS's use of Santa Maria in Brazil and in the Netherlands, where the substance enjoys relative legal freedom. Groisman (2000), in an unpublished dissertation, discusses Santo Daime's expansion to the Netherlands, arguing that in the European context Santa Maria was taken to be an integral part of the Daimista tradition, with a status on a par with that of Daime. Although he treats the use of Santa Maria in the Netherlands as, in large measure, equivalent to its use in the Brazilian context (which, in our view, is imprecise),

his observations do allow us a glimpse into the very dynamic processes of transformation and reinvention that the use of Santa Maria is undergoing in the Dutch Daime churches.

In this context of greater legal liberty there seems to be the beginnings of both a spontaneous development of strong mechanisms of symbolization and of strategies for establishing efficient controls over the use of Santa Maria. According to Groisman (2000), the Santa Maria used in Dutch Daimista rituals generally comes from personal gardens and its preparation for consumption involves a ritualized effort on the part of the church members. Moreover, Groisman points to innovations such as holding introductory meetings with Santa Maria for novices (before they drink Daime), and the custom of smoking officially at intervals during the religious ceremonies. We have not done fieldwork in the Netherlands, but we speculate that in the Dutch Daimista context the patterns of *Cannabis* use and abuse vary significantly from those present in Brazil partly due to the plant's different legal status in the two countries. Despite the many legal and methodological challenges posed by such a design, we believe that a natural experiment comparing CEFLURIS members' use of Santa Maria in a ritual/semi-legal context (e.g., the Netherlands) versus in a non-ritual/illegal context (e.g., Brazil) could help clarify empirically the relationship between drug prohibition and the degree to which more integrated, less problematic cultures of psychoactive substance consumption can develop. CEFLURIS would seem to provide a privileged setting for such an investigation. The importance of the legality of a substance's use should not, however, be over-estimated as it is just one variable among many others that can influence how a substance is used. Within Brazil, as within the Netherlands, there of course exist different patterns of Santa Maria consumption among CEFLURIS members. The legal status of a psychoactive substance certainly cannot explain all aspects of how it comes to be handled and consumed, but this factor nevertheless needs to be paid close attention in investigations of substance use.

Considerations for an interdisciplinary research agenda

As greater numbers of people seek out ayahuasca-using psychotherapeutic centers and religious groups because of problems with psychoactive substance dependence, investigators in the health sciences will likely soon feel the necessity to weigh in more formally on the debates about such uses of ayahuasca. New scientific studies may arise which attempt to investigate the claims of these groups about the efficacy and safety of their practices. Hypothetically, this could eventually lead to larger, more clinically significant studies that include, for example, randomized double-blind experimental protocols with control groups. Should such research be conducted within the context of religious, shamanic, psychotherapeutic, and/or other non-strictly medical practices? Or should they be carried out in the secular laboratories and procedure rooms of modern hospitals? We propose that future studies of the therapeutic potentials of ayahuasca would benefit greatly from an interdisciplinary approach that makes use of the available anthropological data on the ritual uses of ayahuasca when dealing with the necessary methodological and practical considerations that such research would demand. We will not enter here into a detailed discussion of contem-

porary biomedical experimental methodologies; rather we will outline broad interdisciplinary questions that we argue should be considered for an agenda for future research into the use of ayahuasca in the treatment and handling of dependence problems.[13]

A basic challenge for biomedical research in this area is to try to establish the degree to which the influence of the therapist or religious group can be separated from a possible pharmacological role of ayahuasca, if it is indeed possible to separate and speak of such an autonomous entity. This is an especially intriguing question given the potential importance of the patient-therapist relationship for general treatment outcomes, or more specifically, the degree to which participation in a religious community is thought to be positively associated with recovery from psychoactive substance dependence (Sanchez and Nappo 2007). In order to attempt to isolate the 'religious variables' or the 'psychotherapeutic variables' from the 'pharmacological variables'[14] at play in healing uses of ayahuasca, one might, as some investigators have done, measure the effects of administering active or placebo ayahuasca to a group of volunteers in a single setting, such as a religious setting (Santos *et al.* 2007), or a laboratory setting (Riba 2003; Riba and Barbanoj 2005). Alternatively, one could administer the same active ayahuasca preparation to groups of volunteers in different settings, such as a religious context, a psychotherapeutic context and a recreational context. Even it if it is not possible to discuss this topic in sufficient detail here, it is nevertheless important to note that these attempts to isolate the 'pharmacological variables' of the ayahuasca experience are quite complicated, and that artificially constructed research settings are never free of their own effects on the subject of study (for further discussion, see Labate *et al.* 2009).

It would be interesting to go beyond traditional pharmacological research models to design studies of a truly interdisciplinary nature by, for instance, utilizing the qualitative methods of anthropology and psychology to take into account, in conjunction with variables like dosage and genetics, the cultural and life history factors that can influence an individual's ayahuasca experiences. While it is widely recognized that set and setting are important factors in determining the actions of psychoactive substances in general, and especially psychedelics (see Winkelman and Roberts, 2007a), biomedical studies rarely address the important role of symbolic efficacy in the production of healing – a phenomenon shaped by the expectations of the patient, the healer, and the community (Lévi-Strauss 1963). Native conceptions about health, illness, and healing should therefore surely be considered in evaluating the therapeutic uses of ayahuasca and their outcomes.[15]

13. A common example of such a methodological critique is that the double-blind experimental design is overly difficult to rigorously implement when using psychedelic substances because of the challenge of camouflaging the unique and powerful effects of these substances (see Halpern 2007; Winkelman and Roberts 2007b). For further discussion of the challenges and future potentials of using conventional psychopharmacological methods to study ayahuasca and other psychedelics, see O'Brien and Jones 1994; Strassman 1995; Gouzoulis-Mayfrank *et al.* 1998; Grob 1998; Doblin 2000; McKenna 2004; Riba and Barbanoj 2005; Frecska 2007; Winkelman and Roberts 2007a; and Johnson *et al.* 2008.

14. The complex and limiting attempts of science to separate or purify the realms of nature and culture in human experience have been and continue to be analyzed under the rubric of the anthropology of science. See, for example, Latour (1993), among others.

15. For example, according to Daimistas, some afflicted spirits [*espíritos sofredores*] may seek out Santo Daime in search of light [*luz*] and should be indoctrinated [*doutrinados*]. Sometimes such spirits might incorporate in the apparatus [*aparelho*] (that is, the physical body) of a medium and drink Daime through him or her.

Individual and group conceptions of drugs are especially important for any analysis of what constitutes the treatment or handling of substance dependence. As we saw in the case of Santa Maria, a substance may figure into certain contexts as a remedy and in others as a vice.[16] Another good example of the ways the ideological and moral prescriptions of a group can influence substance consumption patterns may be found in the fact that in the UDV, as far as we could determine from our observations, almost no one seems to smoke tobacco, although many members tell of having been smokers before joining the group. As is well known, nicotine dependence is one of the most difficult dependencies to treat, which suggests that the situation found in the UDV regarding tobacco use could hardly be attributed solely to the pharmacological properties of ayahuasca.

The comparison of groups that use ayahuasca in the treatment or handling of dependence with religiously-oriented organizations, like Alcoholics Anonymous, that serve a similar population but without the use of psychoactive substances should also be considered. This sort of analysis might also help to tease apart the effects of 'religious variables' and 'pharmacological variables'. Such a comparison also draws into relief an important fact that should not be forgotten: in Brazil, non-ayahuasca religious groups can practice many different forms of healing, and the religious uses of ayahuasca are legal, but its therapeutic uses outside of conventional medical contexts are prohibited (Goulart 2004; Labate 2005; Rose 2005; MacRae 2008). In Brazil, the topic of the healings performed by the many religious and therapeutic communities and centers is often controversial because of the low degree of medical professionalism that some exhibit[17] and the lack of official monitoring of these groups' activities. This controversy is only exacerbated by the addition of the therapeutic use of ayahuasca into the equation. Issues like this semantic and almost arbitrary distinction between 'religious' and 'therapeutic' call for serious

From the point of view of an observer, the individual drinks the Daime, but from the emic perspective, it is the spirit itself who consumes the substance to become enlightened (Alves 2007; on Daimista concepts of illness and healing see also Peláez (1994) and Rose (2005)). On the other hand, according to reports that we collected during our field research, in some cases certain obsessing spirits [*espíritos obsessores*] may induce the 'addict' to consume certain 'drugs' to satisfy them. There may thus be variation, with the spirit said to be 'addicted' or the individual 'addicted' due to the external influence of the spirit. The latter possibility seems to be the case in the Barquinha, an ayahuasca religion which we do not discuss here, but which has generated a number of anecdotal reports of 'curing' substance dependence (Mercante 2006). In the Barquinha, spiritual work consists of, for example, removing the obsessing spirit from the company of the dependant during a session with a class of spirit known as *Preto Velho*. The *Preto Velho* may use techniques such as discharging herbal baths [*banhos de descarrego*], among others, to weaken the spirit – an action which would considerably diminish the desire of the individual to consume the psychoactive substance, making him or her more open to the treatment (ibid.).

16. We should not forget that ayahuasca itself, which is associated by all the groups described here with some notion of healing, in other contexts may sometimes be considered a 'drug' to be combated, as in the case of groups such as Narcotics Anonymous, where total abstinence from any use of psychoactive substances is suggested to be the only means of controlling the 'illness of addiction' (Loeck 2006).

17. This problem is clearly related to another, much wider, issue, which is the tension between conventional Western medicine and folk therapies and alternative healing practices (including here religions) in Western countries today. For critiques of mutual aid groups by medical professionals and others, see Burns and Labonia Filho (2006). On the relationship between Western medicine and folk healing practices and forms of knowledge in Brazilian history, and the former's attempts to constitute itself as a hegemonic healing practice, see Montero (1985).

reflection on the boundaries we place between psychotherapy, religion and healing, as well as the ethical and legal issues associated with the role of the State and medicine in shaping the health, body, and subjectivity of the individual.

Finally, current research into the use of ayahuasca in the treatment of substance dependence should be contextualized with respect to the interrupted tradition of psychedelic and psycholytic therapies that were developed from the 1950s to the 1970s. For example, it could be suggested that the first contact of people with ayahuasca in the context of Santo Daime might resemble the insight, revelation or awakening experiences of patients in the early psychedelic therapies with LSD aimed at treating alcoholism and other dependencies (Abramson 1967; Grinspoon and Bakalar 1979). Alternatively, one might in some sense interpret the UDV's religious ceremonies as having certain similarities with group therapy because of the emphasis placed on personal growth and group cohesiveness during the ceremonies. The most direct legacy of this decades-old research is probably to be found in the work of the Takiwasi and IDEAA centers, which explicitly adopt Western psychotherapeutic techniques, such as individual therapy and group sessions, to aid in integrating the ayahuasca experience after the rituals. As some scholars have noted, psycholytic therapies would frequently include shamanic elements in the therapeutic setting (Passie, 2007), thus providing another parallel between older psychotherapy research and the practices of current-day ayahuasca groups.[18]

One of the most promising results of clinical psychedelic research done in the 1950s and 1960s comes from the use of psychedelic agents in conjunction with psychotherapy – as opposed to the more reductionist psychedelic pharmacotherapy model, in which psychedelics are administered without any accompanying psychotherapy. The accumulated experience of psychedelic therapists suggests that the period of psychedelic 'afterglow'[19] is likely a source of important therapeutic benefit (Pahnke *et al*. 1970; Halpern 2007), seeing as how during this period the patient may experience 'increased openness and willingness to communicate' (Albaugh and Anderson 1974, cited in Calabrese 2007: 31). In view of the hypothesis that psychedelics have promising anti-addictive properties which last for an indeterminate, but finite period (Halpern 2007: 4), belonging to a religious community or psychotherapeutic group that uses ayahuasca on a regular basis may act as an efficacious form of substitution therapy. In fact, active participation in such groups might facilitate a 'prolonged afterglow' (Halpern 2007: 7) and increase the possibility of successful treat-

18. In our fieldwork we have noted an ever-greater proliferation, especially in Europe, of groups that use ayahuasca in psychotherapeutic contexts, which are not necessarily directed at the treatment of dependence, but occasionally address this type of need. Many of the leaders of these groups are people familiar with various psychedelic substances and with the techniques of psychedelic and psycholytic therapy. In this sense it is the psychedelic therapies that encounter ayahuasca, which is sometimes administered in workshops together with other psychedelics (simultaneously or on alternating days). According to López Pavillard (2008), in the context of Spanish neo-shamanism, ayahuasca analogs are frequently used. These are any of various combinations of pure chemical substances (e.g., harmine + DMT) and/or plants rich in such substances (e.g., *Peganum harmala* + *Mimosa hostilis*, or jurema – a combination known as juremahuasca). These preparations produce effects supposedly similar to those of ayahuasca (Ott 1994, 2004).

19. The 'afterglow' refers to the positive physical and mental effects that can sometimes remain with the individual for days or weeks after the use of psychedelics.

ment. Hopefully, future research into the therapeutic uses of ayahuasca can learn from the successes and failures of previous psychotherapeutic work done with other psychedelics and subsequently contribute new and significant findings to the extant body of knowledge.

Research into the different ways that ayahuasca is and may potentially be used in the treatment or handling of substance dependence problems requires that careful attention be paid to a broad set of interdisciplinary considerations. We have attempted to outline here only a few lines of inquiry to be pursued, including: the extent to which the effects of ayahuasca may be reduced to and modified by 'religious', 'therapeutic' or 'pharmacological' variables; the importance of anthropological methods, native concepts and social contextualization in understanding substance use and dependence; and the possibility of using historical comparisons to better understand past and present practices.

Final considerations

This text has reviewed the available evidence of how ritual ayahuasca use is employed in South America – specifically in complementary, psychotherapeutic Amazonian rehabilitation centers and urban Brazilian religions of folk origin – in the treatment and handling of psychoactive substance dependence. While the surveyed data was not always generated by studies with the greatest generalizability or methodological rigor, these studies offer preliminary evidence that the ritual use of ayahuasca may serve as an effective tool in the treatment, and religious handling, of substance dependence problems.

The general assumption that ayahuasca heals substance dependence has become a kind of self-evident truth within the ayahuasca field. Takiwasi plays an important role in the creation of this idea; the uses of ayahuasca within the Brazilian religions and IDEAA are also frequently cited as examples of ayahuasca's therapeutic value. This naive point of view has often been incorporated into descriptions of ayahuasca found in the Brazilian media and even in some scientific studies (which are frequently written by enthusiastic researchers from the ayahuasca field).

The uses of ayahuasca for treatment and healing can be understood within the diffuse tradition of using other psychedelic substances for the purpose of stimulating 'mystical-type' experiences that may have persisting positive effects (Griffiths *et al.* 2008), particularly for substance abuse and dependence (Dyck 2006). Many factors are expected to influence the success of different psychedelic treatments for different kinds of dependence problems. Such factors include, but are not limited to, the normative capacity shared by different ritual contexts, as well as the pharmacological nature of the substance and the mechanisms by which it acts (Callaway *et al.* 1994; Grob *et al.* 1996; McKenna *et al.* 1998; McKenna 2004; Barbosa *et al.* 2005; Santos *et al.* 2007; Labate *et al.*, in press).

Should future research provide substantial evidence that, beyond the mere pharmacology of ayahuasca, the cultivation of the therapeutic bond or a religious zeal plays a significant role in the health outcomes of ayahuasca-using centers and religions, there will be important implications for the formulation of public policies on the therapeutic uses of ayahuasca. For example, it would have to be decided whether physicians could

openly refer their patients to centers and religious groups, such as those mentioned here, and if so whether health insurers or the government would finance such organizations to perform ayahuasca therapies. It should also be asked: who might be officially licensed by the State to conduct therapy sessions with ayahuasca, and how might such licensure be obtained? Would licenses be granted to psychiatrists, therapists, nurses, shamans, *padrinhos* and *mestres*, groups such as Alcoholics Anonymous, or priests? What sorts of didactics and self-experience with ayahuasca might such training and certification entail? Might medications be made from ayahuasca to be administered in clinical practice by physicians? What kinds of intellectual property considerations might be important, such as the protection of or compensation for using forms of traditional indigenous knowledge (UMIYAC 1999; Labate 2005; Tupper 2009)?

We have analyzed many of the challenges facing a research agenda concerned with the therapeutic potential of ayahuasca, in particular for substance dependence. While it is important to stimulate scientific research in this area, investigations of this nature should not be the only means of approaching the phenomenon, nor should they monopolize the 'proof' of the 'efficacy' of the different shamanic, psychotherapeutic, and religious uses of ayahuasca. It is worth pointing out that many practices of contemporary biomedicine – such as choosing which medications to use for which patients – are guided by tradition or institutional affiliation and are often not validated by the strictest criteria of medical science; also, clinical practice normally differs greatly from practice under experimental and laboratory conditions. That is to say, we are in danger of ethnocentrically applying certain demands on the 'medicine of others', but not on our own medicine (Winkelman and Roberts, 2007b). The pursuit by some ayahuasca users of a scientific seal of approval that could validate native claims of safety and therapeutic efficacy while shielding these users from accusations of charlatanism should not obviate the right of other ayahuasca users to be recognized as legitimate in their own terms.[20]

The apparent improvements in many anecdotal cases of psychoactive substance dependence reported by the various psychotherapeutic and religious groups that ritually use ayahuasca, as well as by anthropologists, psychologists, and psychiatrists who have studied this phenomenon, represents a promising lead for future research. The effects of such complex ritual practices will likely be best understood through systematic interdisciplinary studies that combine a quantitative approach with the subtleties of qualitative and ethnographic methods. Such an interdisciplinary effort must be accompanied by a sincere attempt at a dialogue with 'native', emic knowledge so that the understanding acquired over decades by the various groups that use ayahuasca in the treatment and handling of dependence and other physical and spiritual ailments may better inform the society at large, in which the use of ayahuasca is constantly growing and expanding. With this text we hope both to call attention to the importance of this intriguing cultural and mental health phenomenon, and to help stimulate and guide future research in this area.

20. For example, there are more orthodox ayahuasca groups (indigenous or Western) that are actively opposed to the use of ayahuasca in any secular context, whether in animal experiments, research with human subjects in clinical contexts, the creation of synthetic substances from the raw materials that make up ayahuasca, or even any kind of scientific approach to the subject.

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