



# *Ayahuasca from Peru to Uruguay: Ritual Design and Redesign through a Distributed Cognition Approach*

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ISMAEL APUD

Facultad de Psicología,  
Universidad de la República, Uruguay  
ismaelapud@psico.edu.uy

## ABSTRACT

*Ayahuasca is a psychoactive substance from the Amazon rainforest regions of Peru, Colombia, Ecuador, and Brazil. Although its use originated among indigenous tribes in the Amazon basin, it has become increasingly popularized in Western society through the transnational markets of spirituality and religiosity driven by globalization, Postmodernity, and new forms of religious practice. In this paper, we will overview the arrival of ayahuasca in Uruguay by way of four different groups. We will then focus on one of these groups, a holistic alternative therapies center, influenced by Peruvian shamanic traditions in the design of its ceremonies. Last we will introduce a “distributed cognition” model to explain ayahuasca rituals as a system of activity.*

KEYWORDS: ayahuasca, Uruguay, Peru, ritual, distributed cognition



## INTRODUCTION

*Ayahuasca* (from the Quechua words *aya*, which means spirit, soul, or dead person, and *waska*, which means vine, thus roughly translated as “vine of the spirits” or “vine of the dead”) is widely used throughout the Amazon basin, where it is known by different names depending on the cultural area (Figure 1). In Colombia it is known by the Tucano name of *yagé* or *yajé*, in Ecuador it is referred to by the Shuar word *natém*, and in Brazil it is called *Daime* (the name of the saint believed to inhabit the brew) or *hoasca* (an adaptation of

the Quechua term to the Portuguese language). Although its use originated among indigenous tribes throughout the Amazon basin, the popularization of ayahuasca in Western society owes primarily to its use by Brazilian churches in the first half of the 20th century and the spread of “ayahuasca sessions” in urban areas in the 1980s in countries like Peru, Ecuador, and Colombia. It was in the 1990s that ayahuasca began to appear in Uruguay, as part of certain religious–spiritual ceremonies linked to foreign traditions, mainly from Brazil and Peru. These practices remain “strange” and exotic for the average Uruguayan citizen, although this new kind of spirituality has begun to attract a wider public within a certain sector of the population, mostly associated with “New Age informal networks” (Carozzi 2000; Rothstein 2001) or the “mystic–esoteric nebula” (Champion 1995).

In this paper, we will focus on two main topics: (1) the arrival of ayahuasca in Uruguay and (2) an analysis of ayahuasca ceremonies through a distributed cognition approach. In the first section, “Ayahuasca Groups in Uruguay,” we will describe the emergence of ayahuasca cults in Uruguay, while in the second section, “From Peruvian Shamanism to a Holistic Therapeutic Center,” we will take a more in-depth look at the group that was the focus of our research, the Ayariri holistic center of alternative therapies. The fieldwork for this research was done mainly during 2011 and 2012 using an ethnographic approach that involved not only the classic methods of participant observation and interviews but also the application of quantitative methods (cf. Apud 2013b). The research also included ethno–touristic travel to Peru, where we were able to observe the negotiation of meanings between Peruvian healers and Western holistic traditions (for the complete results of the research, see Apud 2013a). In the sections, “Design and Redesign in Ayahuasca Ceremonies” and “Understanding Ritual through a Distributed Cognition Approach,” we will analyze ayahuasca ceremonies using a distributed cognition model related to the notion of “systems of activity” from a historical and cultural perspective (Cole and Engeström 1993). In the section “The Experience as a Final Synthesis” we will describe the most common phenomenological experiences of the participants, grouped under four main categories (animism, trance–possession, embodiment experiences, and dialogic consciousness).



#### AYAHUASCA GROUPS IN URUGUAY

To understand the arrival of ayahuasca ceremonies in Uruguay, it is important to consider the historical meeting of different religious–spiritual trajectories. Briefly, we can observe two different trajectories. One is related to traditional cultures, such as those of tribal or rural communities, coming from other countries such as Peru or Brazil. On the other hand, we have the

religious and spiritual movements connected with the Western countercultural movements of the 1960s, with their respective changes after globalization and the rise of international networks of spiritual and alternative religions in the context of the so-called Postmodernity and its new religious movements (NRMs). To understand this new kind of religiosity, we must leave behind the classic “substantive” definition of religion, shaped under the “world religions” model (Christianity, Judaism, and Buddhism), and think of religiosity under a “functionalist” definition (Hervieu-Léger 2005), where the emphasis is not on the structure or institutionalization of the cultural phenomenon but rather the existential, emotional, and symbolic function of religiosity as a social and psychological process. From this perspective, the various NRMs associated with the so-called New Age, the vindication of alternative traditional knowledge, and a spiritual conception as opposed to scientific materialist determinism are “religious” phenomena, without the need for an institutionalized or structured organization (Figure 1).

In Uruguay, this new kind of religiosity became more prevalent after the fall of the military dictatorship (in the mid-1980s), the consequent democratic transition, and the arrival of globalization. At its roots, the modern Uruguayan state was conceived based on a positivist and rationalist French Jacobin model (Caetano and Geymonat 1997), whose main characteristic was the division between the political and religious fields, a historical process that transformed politics into a kind of civilian religion (Guigou 2003). Under this model, religion was segregated from public to private spaces. Nevertheless, with the end of the dictatorship and the arrival of democracy, the values of the modern state were reformulated in line with the new exposure to globalization and new ways of “being religious.” On one hand, the Uruguayan state re-signified its secularism in a more permissive way, opening public spaces to religions, which began to play a major role in the new national



FIGURE 1. ON THE LEFT, A CROSS-SECTION OF THE AYAHUASCA VINE (*BANISTERIOPSIS CAAPI*); ON THE RIGHT, A CHACKRUNA BUSH (*PSYCHOTRIA VIRIDIS*). MIXING AND BOILING THE TWO PLANTS TOGETHER IS ESSENTIAL IN PREPARING THE AYAHUASCA BREW. (PHOTO BY AUTHOR, OCTOBER 2012).

cultural background; this change was a common tendency in Latin America (Parker 1995). On the other hand, the privatization of religious practices seems not to have affected the new postmodern forms of individual spirituality and religiosity, related to what some authors have called the mystic–esoteric nebula (Champion 1995) or New Age networks (Carozzi 2000; Rothstein 2001). Generally these social networks comprised people with a specific sociocultural profile, most of them from an upper- or middle-class background. Each person participates without losing their “individuality,” in line with the general values of the “experience within” and “do-it-yourself” characteristics of the New Age movement and other similar spiritual paths related to Postmodernity. According to Danièle Hervieu-Léger (2005), the legitimacy of belief has changed from the institution as a place where the truth resides, to the believer, and his or her new ways of being religious, as the *bricoleur* believer, the most common in the postmodern era.

As we mentioned earlier, it was in the 1990s that ayahuasca cults made their appearance in Uruguay (Apud 2011) as part of the activities of groups like the Santo Daime Church, Camino Rojo, the Sol de la Nueva Aurora Shamanic Spiritual Institute, and the Ayariri holistic center of alternative therapies:

- (1) **Ceu de Luz** is a center affiliated to the Santo Daime Church and has been studied by the Uruguayan researchers Victor Sanchez Petrone (2006) and Juan Scuro (2012). The Santo Daime Church has been active in Uruguay for 15 years but was officially recognized by CEFLURIS (“Centro Eclético da Fluente Luz Universal Raimundo Irineu Serra,” one of the Daimist traditions) in 2006. The Santo Daime Church was founded by Raimundo Irineu Serra (known as “Mestre Irineu”) in Río Branco (in the Brazilian Amazon state of Acre) and is one of the three most important ayahuasca churches in Brazil, along with Barquinha and União do Vegetal. With the death of Mestre Irineu, the Santo Daime community split into two main branches: Alto Santo, which continues the tradition in a more orthodox approach with few changes and a regionalist policy, and CEFLURIS, which was founded in 1975 by Sebastião Mota de Melo (“Padrinho Sebastião”) and is more eclectic, pursuing an expansionist policy resulting in the creation of centers not only in Brazil but also in other countries, such as Argentina, the Netherlands, Spain, Italy, Japan, England, France, Switzerland, and Uruguay. Both CEFLURIS and the rest of the Brazilian churches share a cultural environment with common religious roots, linked to *umbanda*, indigenism, popular Catholicism, and spiritism (Labate et al. 2008).
- (2) **Camino Rojo (Red Path)** is an international organization with centers in Peru, Ecuador, Brazil, Argentina, Colombia, Spain, and England. Its leader is the Mexican Aurelio Díaz Tepankalli, and its lineage of believers is

related to the Lakota people of North America, although its symbolic system is more a pan-indigenous syncretism where we can observe rituals from North America (the “vision quest”), Mesoamerica (the *temazkal*), and South America (ayahuasca and San Pedro ceremonies).<sup>1</sup> The ideology of the organization is the recovery of ancestral memory and connection with the “Great Spirit,” ancestors, Mother Earth, and the whole universe. The Uruguayan center started its activities in the late 1990s and was recognized by Aurelio Díaz in 2002. The Uruguayan group has since split from the international organization and currently acts as an independent cell.

- (3) *Sol de la Nueva Aurora* (Sun of the New Dawn) was registered as an NGO in Uruguay in 2010, but its activities started several years earlier. It was during an ayahuasca session that the institute’s founder was called on by “abuela ayahuasca” (grandmother ayahuasca) to bring the plant to Uruguay, after traveling through Latin America and staying in numerous Santo Daime Church centers. On his return to Uruguay, he decided to adapt the design of the ceremonies in accordance with Uruguayan culture, which resulted in the foundation of a new and different ritual and religious discourse.

In all of these centers, we observed different spiritual–religious approaches and ceremonial settings belonging to a “lineage of believers” (Hervieu-Léger 2005) from different cultural traditions. We also encountered a number of shared features, including: (1) a mystic–spiritual search for knowledge about both the inner self and the dimension of the sacred; (2) the pursuit of a more harmonious relationship with nature, conceived not only as a biological system but also as a spiritual system, where plants, animals, and nonorganic things have their own spirit; (3) the use of what Mircea Eliade (1961, 2009) called “ecstasy techniques,” for example, the use of entheogens such as ayahuasca or San Pedro cactus; and (4) the importance of the “curative,” “purifying,” and “therapeutic” properties of the ceremonial performance from a psychological or physiological point of view (cf. Fotiou 2012).



#### FROM PERUVIAN SHAMANISM TO A HOLISTIC THERAPEUTIC CENTER

The fourth group, *Ayariri* (“spirit of the wind” in the Ashaninka language), is defined as a holistic healing center that specializes in the exploration of consciousness. The center offers different healing traditions as alternatives to the Western model of healing and therapy: Kundalini yoga, traditional Chinese medicine, Grof’s holotropic breathwork, individual transpersonal therapy,

and, of course, ayahuasca ceremonies. According to Hans A. Baer (2003), the first holistic therapies appeared in the 1970s in the United States, grouping them through the creation of the American Holistic Medical Association, where different kinds of professionals join together to promote this heterogeneous group of medicines.<sup>2</sup> Holistic centers are very popular today and can be found around the world; Uruguay is no exception.

The founder of the Ayariri center is a Uruguayan woman with a background in physical education, a former high school teacher who was also interested in the problem of addiction. She left teaching gradually to work as a therapist, studying in the Holotropic Breathwork School of Stanislav Grof, of the transpersonal psychology movement. Her first contact with ayahuasca was in the late 1990s through a friend from her holotropic breathwork courses who brought the brew from Peru. It was thanks to this first contact that she encountered other modes of taking “drugs” that are usually considered as nonaddictive but are also used in some places as healing tools in addiction treatment. After this experience, she decided to travel to Peru and to stay at *Takiwasi* (“the house that heals” in Quechua), one of the first centers dedicated to the treatment of addiction through the use of traditional Amazon indigenous methods. Her second visit to Peru was not to Takiwasi but to Mayantuyacu, the healing center of a well-known Peruvian *curandero* (healer), Juan Flores Salazar, who started to teach her how to serve ayahuasca.

Ayahuasca is used as part of the Peruvian healing tradition known as *vegetalismo*, a set of healing practices from the upper Amazon basin. The first ethnographies about *vegetalismo* stemmed from the fieldwork of Marlene Dobkin de Ríos, who studied the *mestizo* culture of Peru and their folk medicines in the 1970s in Iquitos, as well as ayahuasca ceremonies (Dobkin de Ríos 1992, 2009, 2011). *Vegetalismo* is a tradition rooted in the upper Amazon riverside population, a *mestizo* culture made up primarily of a mix of indigenous and Spanish elements. It is a cultural hybrid, the result of the meeting between the shamanic Amazonian tradition and the advance of Western culture in rural areas (Dobkin de Ríos 2011). As Stephan Beyer (2009) points out, the *mestizo* identity is defined by their Spanish mother tongue, their belonging to a riverside community—about 85 percent of the rural population—and an important degree of acculturation and hybridism with European culture. According to Edward MacRae (1992), it is the equivalent of the Brazilian *caboclo*, with the difference that in *vegetalismo* there are fewer African and Catholic influences. In the case of both the *caboclos* and *mestizos*, the hybridism is not racial but a sociocultural mixing, related to the upper Amazon cultural heritage and the influence of Western culture:

*These days, the Indian population is a minority in the region; and mestizos—the descendants of Indians and Portuguese, Spaniards and*

*Africans—are predominant. Nevertheless, in spite of the radical changes brought about by Iberian colonization, missionary activity, the rubber economy and the exodus of the forest dwellers towards regional urban centers, shamanic practices continue. Although they may present considerable changes and are continually subjected to varied influences; among the “caboclo” healers, or “vegetalistas” as they are often known, these practices still maintain elements of ancient Indian plant lore, including both their usages and their relationship with the spiritual world. The characterization of these practitioners as “caboclos” must be taken more from a socio-cultural point of view than from a racial one. Among the vegetalistas, many could pass for Spaniards, Portuguese or Italians, while others boast Indian features. But, though they may use Spanish as a mother-tongue, in ideological terms, caboclos operate according to the diffuse and complex cultural patterns of the Upper Amazon. The group in whose name they claim to enter into contact with the spiritual world is no longer a distinct community. It is not even an ethnic group. Nevertheless it does have well defined contours and within them, this type of healer plays an important role.*

[MacRae 1992:19]

The main characteristic of *vegetalismo* is to work with plants, which are conceived as beings with higher intelligence that can teach us certain knowledge and with which the *curandero* can communicate in order to solve certain community problems. This sacralization of the plant kingdom is not surprising if we consider the wide distribution of plant species in the Amazon and the extensive use of them with magical and medical aims. According to Rainer Bussmann and Douglas Sharon (2006), more than five hundred species are included in the traditional Peruvian pharmacopeia. In this widespread and extensive use of plants, the *vegetalistas* are known for the intake of certain plants with the goal of communicating with them and embodying their spiritual properties. Although *vegetalistas* usually initiate into the practice with psychoactive plants, the pharmacopeia includes a variety of nonpsychoactive plants considered sacred too. As Beyer explains,

*All these plants are called doctores, teachers, healers; these are the vegetales que enseñan, plants who teach. They are not necessarily psychoactive; each healing and protective plant is a teacher of its own secrets, of how it may be used as medicine. Learning the plants is learning to listen to the plants, who speak a language of puro sonido, pure sound, and learning to sing to them in their own language.*

[2009:61]

When I started my ethnographic fieldwork, one of the first problems I encountered was how to understand the arrival of this kind of practice here in Uruguay—and, more specifically, what a Peruvian ritual tradition was doing in a holistic New Age center unrelated to indigenous traditions at first sight. To understand the presence of these Peruvian ceremonies at Ayariri, it was important to comprehend the exchange between the Peruvian Amazon healing tradition supply and the demand for new therapeutic alternatives from the mystic-esoteric nebula, in a transnational symbolic-religious market. It is a double assimilation: (1) on the Western side, the adaptation of Amazonian *vegetalismo* to mystic-esoteric practices reformulated under the therapeutic notions of the New Age and the redesign of the ayahuasca ceremonies to meet the needs and demands of an urban population with existential problems, using insight as a therapeutic tool; and (2) in the case of the Peruvian traditions, the assimilation of the *curanderos* to a transnational spiritual market system, adapting their practices to the needs of the *gringo* (white Western people), in a supply–demand relationship that offers good economic returns, and in which the *curanderos* recruit their public through travels around the world, the creation of healing centers adapted to a Western public, and participation in transnational ayahuasca networks and the world market of beliefs, increasing day by day thanks to globalization and information and communication technologies like the Internet. In the relationship between the holistic center and the Peruvian healing tradition, there is no traditional shamanic transmission of knowledge in the classic sense; we must conceive the modes of legitimation as neo-shamanic modes of learning and ascription in the context of mystic–esoteric networks and the appearance of holistic therapy centers. So, while in the Amazonian tradition the lineage of believers is transferred through traditional modes within mestizo communities, in the holistic centers the mechanisms of legitimation are more fragmented, related to the religious–spiritual trajectory of the therapists, with their own—explicit or implicit—modes of religious capital and the build up of a personal *curriculum vitae*. The legitimation is heterogeneous, multiple, and construed in accordance with a tacit or discursive knowledge of the sacred and spiritual realms in its relation with therapeutic practice.



#### DESIGN AND REDESIGN IN AYAHUASCA CEREMONIES

The ayahuasca ceremonies at Ayariri have the characteristic design of the Amazon basin *vegetalismo*. At the end of the 1970s, anthropologist Marlene Dobkin de Ríos described the ayahuasca sessions in the urban suburbs of Iquitos in a similar way as they are currently performed at Ayariri. The ritual



is always done by night, in a dark place, where the participants sit on the floor, leaning against the wall. They are provided with something to cover themselves, water, and a vessel for the emetic effects of the plant. The ceremony lasts all night long, and the participants must stay until it is finished. The singing of *icaros*—sacred songs from Peru—is very common, although in urbanized settings other elements are usually included such as musical instruments and chants from various places. As we have mentioned, the participants usually come via the informal social networks of the religious-spiritual market, in a similar way to the one described by Uribe (2008) in the case of Colombia, under the term “emerging *yajé* networks” or the one described by Carozzi (2000) in Argentina, under the concept of “submerged New Age networks.”

It is common in ayahuasca groups to talk about the “design of the ceremonies” when describing the spatial order, the elements, and the rules observed in the ayahuasca sessions. The design is different from group to group: while Santo Daime groups practice their ceremonies in a lighted room, with religious images, music, dances, and a religious hymnbook, in the case of Ayariri and the Peruvian Amazon tradition, the participants sit on the floor, with no light in the room and with a central role played by the *icaros*. In the case of Ayariri, the Peruvian design is adapted to urban necessities, with the incorporation of new elements and rules. This includes, for example, the use of various kinds of musical instruments like various percussion instruments and the *tumank*.<sup>3</sup> Also, while in the Peruvian mestizo context, the singing of *icaros* is guided by strict rules, in terms of who can and cannot sing them, in the ceremonies at Ayariri, collective participation is encouraged at certain specific times during the night, with various songs—not only *icaros*—that can be recognized and sung by the rest of the participants. In the traditional vegetalismo context, the curandero is the only one who can lead the ceremony, alone or with his or her apprentice. At Ayariri there is always at least one assistant, who is in charge of the care of each one of the participants in the room, responsible for such tasks as helping them to go to the bathroom or assisting them when they suffer the emetic effects of the plant. Another important difference is what is generally called the “purpose” for which the participant attends a ceremony. At Ayariri, it is recommended that participants take part in ayahuasca ceremonies with a specific *propósito* (purpose), which is an explicit motif that the participant brings in order to ask the plant about it. While in the Peruvian mestizo context, people often go to a ceremony in order to deal with some characteristic folk illness or disease of the traditional culture (i.e. *susto*, *mal de ojo*, *envidia*), in the urban rituals, we observe reasons associated with upper-middle class concerns, with a strong cultural influence of psychological notions. It is a population that uses the ceremonial space as a psychotherapeutic device with an emphasis on existential conflicts.

All of these changes that we refer to as “ritual redesign” (Apud 2013a) occur in the transfer of this ritual practice from Peruvian Amazon vegetalismo to an urban Uruguayan New Age context and imply changes in both symbolic and performance elements. The design of the ceremony sets the stage for the experience itself, so we can observe how two subjects in different settings can go through very different experiences under the effects of the same substance. The design is, therefore, an important agent in the “psychedelic experience,” together with the psychological features of the subjects and their cultural life trajectory, which include styles of believing and cultural modes of care and observance of the self. So we can say that there is not a raw or natural experience when an entheogenic substance is consumed, or, as Lévi-Strauss (1997) has already said, there is not a “natural message” because the hallucinogens are amplifiers and triggers of latent contents of a culture, making its elaborations easier for the subjects. Timothy Leary (2005) called these variables the “set and setting,” which include both the context and the individual.



#### UNDERSTANDING RITUAL THROUGH A DISTRIBUTED COGNITION APPROACH

We will consider the psychoactive substance as one of the technological devices of the design, together with the icaros, the symbols, the musical instruments, and so on.<sup>4</sup> We will use the term “technology” in a general sense, defining it as all human artifacts that mediate between humans and reality, both physical and psychological. We will stress in the pragmatic function of technology and symbols, but we must always remember other possible functions and that a theoretical framework is always a heuristic recourse. We would like to introduce in our analysis of the ceremony the concept of “distributed cognition” in order to gain a better understanding of the ayahuasca ceremony experience, which includes altered states of consciousness (ASC). According to Hollan et al.,

*Whereas traditional views look for cognitive events in the manipulation of symbols inside individual actors, distributed cognition looks for a broader class of cognitive events and does not expect all such events to be encompassed by the skin or skull of an individual. [Hollan, Hutchins, and Kirsh 2000:175–176]*

[Correction added on 27 March 2015, after print publication: ‘Hollan, Hutchins, and Kirsh 2007:175–176’ was changed to ‘Hollan, Hutchins, and Kirsh 2000:175–176’].

We will consider the cognitive processes outside the “skin and skull” of the individual, including not only internal resources but external resources too, such as bodily performances, language, and technological artifacts. Thinking of the *locus* of the mind as not only in the brain or the nervous system but also in the cultural and social environment results in the need for methods of research for the study of human cognition that are not limited to traditional artificial experimental designs. This is because to understand cognition in a distributed sense we must observe it in its natural environment, with methods that can explain human activity in sociocultural frames, in order to study the relations between the inner cognitive structures and the external ones. The distributed cognition approach implies moving beyond a model focused on the individual in order to extend the mental processes outside the brain, given that both material and symbolic technology are cognitive devices embedded in specific sociotechnical ecologies (Kirsh 2006).

Earlier influences on this new kind of approach include the philosophy of technology of Martin Heidegger, James Gibson’s ecological psychology (and his theory of affordances), Gregory Bateson and his ecology of mind, and the cultural–historical approach of the Soviet school, under the influence of Marxist thought. In the Soviet school, Vygotsky (1982) developed the notion of “cultural artifact” as a mediator in the subject–object relationship, illustrated in his famous triangle (Figure 2).

For Vygotsky the category of artifacts includes not only tools (outside guided mediation), but also symbols (inside guided mediation). Influenced by the Vygotsky triangle, Michael Cole and Yrjö Engeström (1993) proposed a distributed cognition approach, adding to the subject–object–artifact triad the relationship with a community, the rules, and the social roles (Figure 3).

The whole of these components comprises what the authors call a “system of activity,” a unit of analysis for the study of human behavior. It is a system of historically situated relations, which includes individuals and their cultural environment. In our study of ayahuasca ceremonies, our interest was to

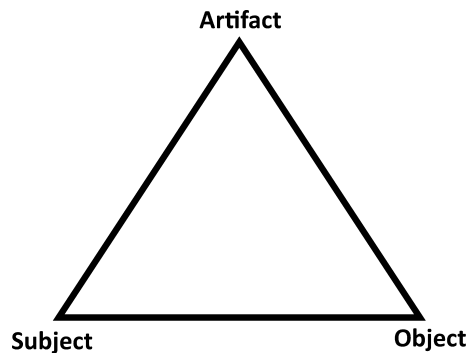


FIGURE 2. VYGOTSKY TRIANGLE.

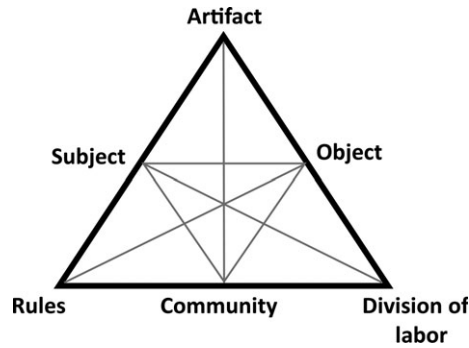


FIGURE 3. COLE AND ENGESTRÖM DISTRIBUTED COGNITION APPROACH, BASED ON VYGOTSKY TRIANGLE.

extend the model to the ritual in a way that allows us to understand cognitive and subjective experiences, including context and culture. To accomplish this goal, we will redefine the system of activity model and fit it into the specific features of the ritual as a human activity (for more details see Apud 2013a) (Figure 4).

The triangle is an analytic and heuristic diagram, which divides certain ceremony features that are interconnected in real life. For example, it is impossible to think about the design without including the role assignments inside the whole group, although it is also true that the assigned roles exceed the bounds of the ceremonial design, being connected with the informal relationships of everyday life. Despite all these considerations, the analytic distinctions offered by the concept of “system of activity” allow us to understand the cognitive actions in their relations with the social technologies, the ceremonial prescriptions, and the symbolic systems of the specific cultural environment:

- (1) **Design:** As we said previously, in the “native language” the concept of design is commonly used to refer to the ensemble of rules, spatial order,

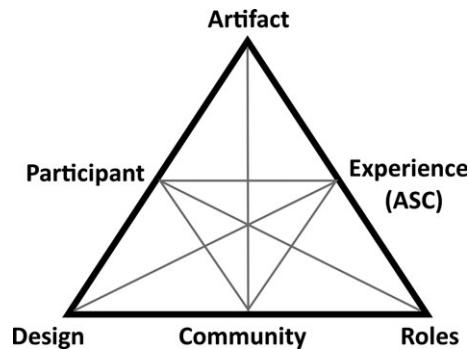


FIGURE 4. SYSTEM OF ACTIVITY MODEL REDEFINED TO THE SPECIFIC FEATURES OF THE RITUAL.

and technologies that comprise the ceremonies. Depending on the lineage of the group, the design can be significantly different, so it is not surprising to find different kinds of narratives or experiences of ayahuasca visions according to the set and setting, or, as we say, according to the elements of a specific system of activity. In our particular case, we have already analyzed how the Peruvian design has been redesigned in the center and studied in terms of some specific aspects.

- (2) **Community:** In the case of Ayariri, we can observe that social relationships between the participants are not the same as the ones displayed in other groups, such as Camino Rojo or Santo Daime, which have a more structured social organization. When it comes to Ayariri, the people who tend to go to the ceremonies are in most cases not only interested in the ayahuasca rituals; they also participate in other kind of activities, such as yoga, individual therapy, or traditional Chinese medicine, and they take part in these activities as users or consumers, without a formal religious or spiritual membership. Even though they are not a religious community, mutual recognition and shared clusters of beliefs play an important role in the space of the ceremony, bringing emotional support, empathy, and a feeling of belonging.
- (3) **The participant as an individual:** Another important factor in the variability of ASC during the ceremony is what we call the spiritual–religious trajectory of the participant; subjects participating in the same ceremony can have totally different experiences in accordance with their historical and cultural trajectories, which include their psychological character, personal symbolic systems of interpretation, and religious and spiritual expertise in mystical or religious practices (particularly those that involve entheogens). Together these factors comprise an individual trajectory that plays a major role in the course of the ceremonies and includes tacit abilities in the management of cognitive experiences such as mental imagery cultivation (Noll 1985) or the development of an existential intelligence (Tupper 2002) during and after the ceremonies.
- (4) **Roles:** As was previously observed, at Ayariri the roles and tasks assigned in the direction of the ceremonies are different from the classic shamanic role in traditional Peruvian *vegetalismo*. At Ayariri we could observe a functional reformulation according to the necessities of the urban context and others related to the syncretic environment of New Age performances and beliefs, generally focused on therapeutic goals and an introspective mode of consciousness. In the relations between the healer–shaman–director of the ceremony and the participants, we can observe what Taussig (1993) called “implicit social knowledge”: an asymmetric, dialogic, and articulated miscellany of images and symbols between both sides of the relationship, which is possible thanks to the different technol-

ogies used in the ceremonies, as well as the meanings and performances that are learned in the social field and the expectations of each of the participants. The shaman or curandero is a performative artist, with a variety of interaction modes, not necessarily related to symbols or discourses, including various kinds of artifacts with which the healer can induce changes in the visionary and bodily experiences of the participants. The actions performed by the shaman trigger different experiences in each of the subjects, so there is an asymmetric connection between the shaman and the “public,” in accordance with their individual cultural and subjective trajectories.

- (5) **Cognitive artifacts:** The shaman has a variety of artifacts that can be used in the ceremony, such as the ones used to serve the ayahuasca brew, the musical instruments, the tobacco, and so on. The artifacts are sometimes grouped on what is called a *mesa* (table) and can vary depending on tradition and the curandero (see Figure 5). First we have the things with which the shaman serves the ayahuasca, including the bottle with the brew inside and the cup from which the ayahuasca is drunk. The healer could also use a bottle of *camalonga*, prepared with seeds of *Thevetia peruviana*, distilled sugarcane, and other ingredients such as onion and garlic, a brew that is hard to swallow but is considered a powerful spiritual protector. Also used in the ceremonies are perfumes such as *Agua Florida* (flower-scented water) and *Agua de Kananga*, giving the shaman the opportunity to work with odor sensations, which commonly



FIGURE 5. THE MESA USED AT AYARIRI. ON THE RIGHT ARE A SHACAPA AND A MARACA. ON THE LEFT, INSIDE A BOWL, ARE THE MAPACHO CIGARETTES, AND IN THE CENTER ARE THE UTENSILS USED TO SERVE THE AYAHUASCA BREW. THE USE OF MESAS IS WIDESPREAD IN THE ANDEAN SHAMANIC TRADITION, WHILE IN THE AMAZONIAN CULTURE THEY ARE SIMPLER OR NOT USED AT ALL. (PHOTO BY AUTHOR, APRIL 2012)

produce synesthetic phenomena. Last but not least are the musical instruments of the *curandero*, such as the *maracas* and *shacapas*, percussive hand instruments that might induce strong trances among the participants. However, the essential artifacts in the shaman's toolbox are the *icaros*—traditional healers' songs. The *icaros* are the language of the plants and the spirits of the rainforest, and through them the healer learns how to communicate with the spirits. According to Fred Katz and Marlene Dobkin de Rios (1971), the *icaros* not only summon the extraordinary reality of ayahuasca but are also a poetic expression of the *mareación* (dizziness) of the brew, so it is not strange that they can have the power of summoning and controlling the experience.<sup>5</sup> The participants often see the *icaros* as a "psychological support," a reference and a lifesaving rope for the moments when the experience is too intense or chaotic. All these artifacts set up what Stephan Beyer (2009) calls a synesthetic cacophony of perfumes, tobacco smoke, whistles, and songs. From a cognitive point of view, synesthesia is a keyword to understand the shaman's performance and its influence over the consciousness of the participants.<sup>6</sup> According to Luna (1986), *vegetalistas* are masters of synesthesia, with the ability to produce collective visions through their chants and whistling. François Demange (2002:20) suggests that synesthetic phenomena could occur without the use of entheogens, with the mere presence of chants, as a pure trance mode. From a distributed cognition approach, the artifacts–cognition relationship is relevant not only for the physical tools but also for the "psychological tools" as well. Some of the cognitive artifacts can be categorized as "symbolic operators," which are symbols usually manipulated in order to cause psychological effects. In accordance with the distribution of cognitive functions in the environment through symbols and artifacts (*cf.* Clark 2006; Hutchins 2010), we can say that symbolic operators are psychological tools that allow the mind to project beyond certain mental contents in order to think out certain personal or existential topics. The symbolic operators are transmitted by the group and have the liminal characteristics described by Turner (1977), giving the participant the chance of going through a liminal movement of separation–analysis–reaggregation resulting in an insight process about the self and its relation with social structures. The symbolic operators catalyze insights and what Joseph Fericgla (2000) calls "dialogic consciousness".<sup>7</sup>



#### THE EXPERIENCE AS A FINAL SYNTHESIS

The ayahuasca experience is a final synthesis produced under a system of activity that shows itself as a consciousness phenomenon, where all of its elements

are interconnected.<sup>8</sup> In our case, the experiences are most often “experiences of the sacred.” The sacred experience can be understood under different theoretical modes—psychological, sociological, naturalistic, religious—but the essential principle is to accept its phenomenological existence as an experience presented to the consciousness without regarding its ontological status. This statement is in fact accepted today by neuroscientists, for example, in the discovery of divine experiences in temporal lobe epileptics, which suggests the localization of these kinds of cognitive processes in certain areas of the brain (cf. Ramachandran and Blakeslee 1999). After accepting this statement, we can ask ourselves from a cognitive point of view about the nature of the experience as an ASC and, in our case, as a specific one related to the shamanic trance, together with other religious and spiritual experiences. It is not our aim to discuss this topic in depth—for more details, see Apud 2013a—but we would like to mention the difficulties of classifying trance experiences under a single label, a problem already stressed (i.e. Taves 2009). Summarizing, what we intend to demonstrate is the sacred experience as a phenomenological fact and that these experiences are heterogeneous ASC, manifested as sacred for the subject in an “emic” sense but difficult to classify from an “etic” perspective.

In our specific case, we would like to highlight four particular and repeated experiences. Although they may appear in other ayahuasca traditions, we believe they are especially recurrent under the specific system of activity studied:

- (1) **Feeling the presence of the plant's spirit:** This phenomenon is related to the importance of plant spirits in the Peruvian tradition. The ayahuasca spirit appears in different forms, some of them anthropomorphic and in others as a snake or some similar animal. Sometimes it can be only heard or felt as a powerful and mystical presence that Rudolf Otto (2008) called a moment of *majestas* (overpowering majesty). Also reported is the feeling of “being a creature,” of being close to a holy power that makes our ego insignificant but also can help us to see things we cannot see in our ordinary state of consciousness and which is also sometimes described as “healing” the participant's spirit or body.
- (2) **Trance and possession experiences:** One of the main features of experiences with ayahuasca is that they are not only symbolic in the linguistic or semiotic sense of the term, but they also involve bodily experiences. For example, animals and other strange beings seem to go through the participants' bodies in modes where it is very difficult to distinguish what is trance and what is possession.<sup>9</sup> The distinction between the two is commonly used in the literature (cf. Winkelmann 2010). In our fieldwork, it was almost impossible to separate such phenomena as trance, possession, and daydreams.<sup>10</sup> The same problem is indicated by Ioan Lewis



(2003) in his critique of the famous work of Raymond Firth with the Tikopia. Lewis explains how the three modes of spirit relationship can be applied to shamanism and how in the same experience different cognitive events can coexist, such as controlled and uncontrolled possession in the same ASC or out-of-body experiences like “magical flight” and possession at the same time. In our fieldwork, we observed various modes of possession, the most common of which was the feeling that the plant spirit was wandering through the body. The subjects do not lose their consciousness but feel the plant inside them, most of the time as if it were healing their body and spirit. This feeling can be experienced with the sensation of majestas described by Otto and can appear outside the body—as an external entity—and inside it at the same time as an omnipresent presence. We also observed possession phenomena in which the participants lose their ability to distinguish where their own actions end and the actions of the other being inside them begins (for complete details of this experiences, see Apud 2013a). Last, we observed mimesis phenomena, where the participants are transformed into other beings, like a spider, panther, or eagle, moving through other places or landscapes, thinking and behaving like the animal adopted.

- (3) **Embodiment:** All these phenomena demonstrate the importance of embodiment experiences with ayahuasca, where the subject has not only visionary experiences but also experiences involving the body as a whole, showing how some mental processes are connected with certain physical problems or pains. Therefore, as Thomas Csordas (2008) has pointed out, it is necessary to consider the embodiment perspective as a complementary approach to interpretative and phenomenological anthropology. However, with a distributed cognition approach, we could analyze how emotions and memories can be somatically distributed in our body experiences, extending the ideas of an embodied cognition to emotions and remembrances (Riegler 2002; Clark 2008). Bodily experiences are an important event for alternative therapies, which consider the body a central place in therapeutic treatment, as opposed to “Cartesian rationalism,” where the body is only considered from a mechanical perspective and not from a spiritual point of view. The ayahuasca ceremonies seem to open up access to memory located in the body, an emotional register that includes life attitudes, past memories, and problems that are hard to get in touch with in ordinary modes of consciousness. The most common bodily experiences are related to the emetic effects of ayahuasca, where vomiting is considered a spiritual purging and cleansing. From a physiological point of view, vomiting has been explained as a consequence of the higher levels of serotonin-related substances in the serotonergic mechanisms, which causes direct stimulation of the

pneumogastric nerve, as well as diarrhea, in the case of peripheral serotonin stimulating intestinal motility (Lucas S  rpico and Missawa Camur  a 2006). From my own fieldwork experience, vomiting sometimes seems to be related to a basic psychological–bodily mechanism of contents expulsion, when the visionary experiences become uncontrollable or the contents that appear to the consciousness are extremely chaotic, conflictive, or unpleasant. This could be the reason why the emetic effects are experienced as if they were a spiritual cleansing.

- (4) **Dialogic consciousness:** A second therapeutic mechanism considered one of the most important is what we shall call dialogic consciousness, a metacognitive experience where participants have the sensation of being inside and outside their mental processes at the same time. Joseph Fericgla (2000) used the term dialogic consciousness to describe a specific mental dissociation that involves a kind of consciousness capable of talking with itself, as opposed to the logical and structured “dialectic consciousness” of daily life. From Fericgla’s point of view, dialogic consciousness also involves communication with spirits and animist phenomena as anthropomorphic projections of subjective emotions, metaphors of primary processes that arise in the consciousness. In our specific case, we will only consider the ability of the consciousness to be in dialog with itself, in a mental process where subjects feel they are both inside and outside the mental processes that occur in their mind, having the opportunity of deep insights into their psychological automatisms, and a feeling of estrangement from their sense of the self and identity. It is not only a cathartic experience that exposes unconscious contents, repressed biographic memories, and daily problems but also a mental movement that allows the participants to watch their own “acting out” and not be dragged by the automatisms of the mind. This characteristic of the entheogenic experience enables a more objective witnessing of feelings, thoughts, and attitudes, sometimes in such a powerful way that it can feel like an “insight overload,” which later is difficult to remember. But what is interesting is how the participants understand these modes of “knowing of the self” and are capable of working through them, obtaining valuable information. This last assertion does not imply that these kinds of ASC experiences are themselves beneficial to the individual. For this to happen, they must be combined with an appropriate setting and subsequent work and analysis of what happened during the ceremony. This phenomenon is nothing new and can be observed in the psychotherapeutic use of LSD by Stanislav Grof (2008) or even the experiences of Mario et al. (1961, 1965) in Uruguay. In a somewhat different way, Sigmund Freud was one of the first psychotherapists to use this kind of therapy, considering his pioneering

clinical experimentation with hypnosis and the later use of free association, considered by some authors as an ASC (cf. Helvenston and Bahn 2005).



## CONCLUSION

As we have explained in this paper, the emergence of ayahuasca ceremonies in Uruguay took place in the 1990s as part of the general emergence of new forms of religiosity, referred to in the academic literature as NRMs, which were made possible after the return of democracy in the 1980s and the arrival of globalization and Postmodernity. In our specific case, the ayahuasca ceremonies were imported from Peruvian Amazon cultures and adapted to the urban context, in accordance with middle-class necessities in a cultural environment with significant psychotherapeutic and New Age influences. As we have already seen, the “shamanic healing model” turns into something different when it is relocated to an urban setting. We do not see the clever Peruvian *curandero* described by Dobkin de Ríos (2009), with tacit psychological skills to work out different social demands and cultural syndromes in the community, under what the author called the “biology of hope.” In an urban setting, we observed a strong psychotherapeutic influence on the ceremonial design, which could be the cause of the common phenomenon of what Fericgla (2000) calls “dialogic consciousness,” for the analysis of the self. These changes in the set and setting of the ceremonies can be explained through a distributed cognition model, a model of understanding cognition as a system of activity, which we took from Cole and Engeström (1993) and reformulated to explain the dynamics of the ritual. Our thesis is that the system of activity and all its components determine the phenomenological experiences of the participants, in a dialectic game where different cultural, social, and psychological factors interact, producing specific cognitive and symbolic experiences. We think that a distributed cognition model is a useful framework to qualitative and quantitative analysis of ritual, allowing us to disaggregate variables and features of the ceremonies, not only for cultural and historical studies but also for cognitive and basic psychological research.

All these new religious and spiritual practices represent a new context in Uruguayan culture, considerably different from the classic rationalist model of the beginnings of the modern state, and the mainstream cultural secularism of the middle-class Uruguayan population. In the case of ayahuasca ceremonies, we have an additional “noise” resulting from the use of a psychoactive substance with no legal status in the country and ceremonies that are misunderstood by most of the Uruguayan population. This mix between religion and “drugs” has resulted in a few mass media debates, where the words “drugs” and “sects” played a leading role in the discussion (cf. Scuro et al. 2013). To

understand ayahuasca traditions and their arrival in Uruguay, we must move beyond this negative and reductionist point of view and consider religiosity and the use of psychoactive substances from a broader anthropological perspective. These new spiritual practices are not recreational spaces but places where religiosity and beliefs give meaning and spiritual answers to their participants and therefore must be respected under the principles of freedom of religion and general respect for cultural diversity.



#### NOTES

1. The vision quest is one of the most important rituals, where the participants have the opportunity to start their commitment to the spiritual path through a period of ascetic isolation that includes not drinking, eating, or speaking. The *temazcal* (“steam house” in the Náhuatl language) is a type of sweat lodge, prepared in a tent called an *inipi*. Water is poured onto hot stones placed in the middle of the tent, creating intense heat and steam and causing participants to sweat profusely. It is considered to be a therapeutic purifying method. San Pedro is a cactus from the Andes used in religious practices by the indigenous people of the region. Its active compound is mescaline, a strong alkaloid also found in peyote.
2. According to Baer,
 

*The holistic health movement appears to be the outgrowth of several other movements, particularly the counterculture of the late 1960s, with its emphasis on “getting back to nature” and disenchantment with mainstream culture, the human potential movement, humanistic medicine, the wellness movement, Eastern mysticism and medicine, 19th-century Western heterodox medical systems (e.g., homeopathy, osteopathy, chiropractic, and naturopathy), the feminist movement along with the associated natural birthing movement, and the environmental movement. The hippie counterculture sought health care that was compatible with its values of egalitarianism, naturalness, mysticism, and vegetarianism. The “free clinic” movement of the 1960s and 1970s embodied many of these values. Concurrent with these trends, a growing portion of the general public experienced disenchantment with the high cost, bureaucratization, specialization, reductionism, and iatrogenesis of biomedicine. Many of these people were predisposed to the concepts and values of the holistic health movement. Foci of the holistic health movement have included stress and stress reduction, reliance on natural therapies, therapeutic eclecticism, the notion of healer as a teacher rather than a medical authority figure, the belief that the body is suffused by a flow of energy, the belief in vitalism, and individual responsibility for one’s health. [2003:235].*
3. A musical bow from the Amazon region, similar to the Brazilian *berimbau* but without the hollowed-out gourd sound box.

4. According to Aaronson and Osmond,

*The term 'technology', as used here, refers to the entire set of devices, whether mechanical, chemical, or linguistic, by which adaptations of individuals to their environments are enhanced. Plows, clubs, radios, airplanes, fertilizers, drugs, breakfast cereals, grammars, and concepts are each implements and instances of technology, which influence and are influenced by one another. Some implements operate by directly altering the environment in response to the demands of the individual, as when we turn on an air conditioner on a hot day. Others operate by altering the individual to meet the demands of the environment, as when we 'make the last one for the road coffee.' Still others may attempt to integrate the two, as when we read a book to gain knowledge that will help us in particular situations. [1970:3]*

5. According to Katz and Dobkin de Rios,

*Just as one can argue that Gregorian chants and ecclesiastical modes represent tonal relationships in which scales are structured so as to evoke a spiritual experience within the context of Christianity, so too might the ayahuasca music be viewed as an essential component of a nonordinary reality sustained by the sensory overload inherent in drug-induced alteration in consciousness. Such music cannot be divorced from its social context. We should reflect, for a moment, on the nature of hallucinogenic experience, per se, and the quality of reality alteration for the individual. [1971:325].*

6. Synesthesia (from the Greek *syn*, together; *aesthesis*, sensation) refers to the association of two different modes of sensation, like "seeing colors" or "smelling words," and implies some crossing between different sensorial pathways (Goller, Otten, and Ward 2008). It is common when ingesting psychotropic substances and also in temporal lobe epilepsies. It has also been observed many times in ayahuasca ceremonies (Luna 1986; Dobkin de Ríos 2009; Shanon 2010; Demange 2002; Beyer 2009; Fotiou 2010; Apud 2013a).

7. To understand the significance of symbolic operators, we must put aside for a moment the assessment of the scientific truthfulness of the native categories in order to stress their pragmatic meaning and psychological usefulness. For example, the symbolic operator of the "rainforest" viewed as a spiritual entity that connects us with nature, harmony, and our ancestral roots is totally opposed to the scientific notion of the rainforest as a heterogeneous biotic system comprising different species in a struggle for survival. The important issue here is not to what the category refers but rather what psychological effects the symbol has on the participants. Perhaps this step is a bit obvious for some anthropologists, but it is sometimes forgotten in the scientific literature, as reflected by the strong criticism of the indigenous idealization of these mystical discourses (cf. Uribe 2008; Caicedo Fernández 2007; De la Torre 2008) or the most widespread criticism of New Age movements (Rothstein 2001; York 2001; Helaas 2006).

- <sup>8</sup> Victor Turner (1986) uses the term "anthropology of experience" in opposition to the structural functionalist approaches, using Dilthey's idea of *Erlebnis* (experience), where the emphasis is placed on the interpretation of representations and

performative acts as expressions.

*Experience, in our perspective, is not equivalent to the more familiar concept of behavior. The latter implies an outside observer describing someone else's actions, as if one were an audience to an event; it also implies a standardized routine that one simply goes through. An experience is more personal, as it refers to an active self, to a human being who not only engages in but shapes an action. We can have an experience but we cannot have a behavior; we describe the behavior of others but we characterize our own experience.* [Turner and Bruner 1986:5]

From our point of view we do not see a contradiction in the possibility of an interpretation of the experience and the study of cognitive variables from a cognitive perspective.

9. In her fieldwork in Haiti, Erica Bourguignon (1980) studied possession, concluding that the semantic range of the concept for Haitians was more extensive than the one used by psychiatry. From a psychiatric point of view, it is a temporary loss of consciousness, with amnesia, convulsive movements, and personality disorders, which can occur during a trance ceremony. However, for Haitians, it can also appear in children's games, in crisis situations, and in daily situations such as sleep talking, and some diseases with no loss of consciousness. Bourguignon proposed leaving the term possession as a psychological category (related to a conscious splitting where some part of the psyche gains control of behavior), using instead the concept of dissociation. Ritual dissociation can be interpreted or not as spiritual possession, which allows us to discriminate between possession trance and possession beliefs. The term possession is proposed by Bourguignon with no pathologic connotation at all; in fact, ritual dissociation provides the self with a set of alternative roles, in a context of dissatisfaction, social frustration, and poverty. The author stresses its usefulness in an unfriendly world, where only the spirits seem to have some power over reality. Bourguignon defines trance as any ASC; it is when these changes in consciousness are culturally interpreted as possession that we can talk about possession trance.
10. The shaman can also use techniques that do not involve ecstatic trance or possession, such as daydreams, which are a kind of ASC often used in Amazonian vegetalismo, as well as other shamanic traditions. As Nishimura [1987] points out, *The forms of the shaman's trance fall under three broad headings: (1) ecstatic, in which the shaman's spirit leaves his body, rises, flies, and finally meets gods or spirits in the highest heavens; (2) possession, in which gods or spirits enter the shaman's body and possess it; and (3) dreamlike, in which gods or spirits meet the shaman's spirit in the same dimension, that is, the shaman's spirit remains in his body and has an encounter with the supernatural being through visual, optical, auditory, and/or physical hallucinations. These forms are not necessarily always clearly distinguishable, some are transitional and others mixed forms, and the dreamlike form in particular is frequently observed to appear in combination with ecstasy.* [59–60]

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